

# SAFETY DATA SHEET



EXXSOL™ D220/230

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

**Product name** : EXXSOL™ D220/230

**EC number** : 926-141-6

#### REACH Registration number

**Registration number**

01-2119456620-43-0000

**CAS number** : -

**Product description** : Dearomatised Hydrocarbons

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

**Intended Use** : Solvent

#### Identified uses

Manufacture of substance  
Distribution of substance  
Formulation and (re)packing of substances and mixtures  
Use in coatings - Industrial  
Use in cleaning agents - Industrial  
Lubricants - Industrial  
Use in metal working fluids/rolling oils - Industrial  
Use as binders and release agents - Industrial  
Use as a fuel - Industrial  
Functional fluids - Industrial  
Use in laboratories - Industrial  
Polymer processing - Industrial  
Water treatment chemicals - Industrial  
Use in coatings - Professional  
Use in cleaning agents - Professional  
Lubricants - Professional (Low release)  
Lubricants - Professional (high release)  
Use in metal working fluids/rolling oils - Professional  
Use as binders and release agents - Professional  
Use as a fuel - Professional  
Functional fluids - Professional  
De-icing and anti-icing applications - Professional  
Road and construction applications  
Use in laboratories - Professional  
Manufacture and use of slurry explosives  
Polymer processing - Professional  
Water treatment chemicals - Professional  
Use in coatings - Consumer  
Use in cleaning agents - Consumer  
Lubricants - Consumer (Low release)  
Lubricants - Consumer (high release)  
Use as a fuel - Consumer  
Functional fluids - Consumer  
Other consumer uses  
Use in rubber production and processing  
Use in agrochemicals - Consumer

#### Uses advised against

Not applicable.

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**SECTION 1: Identification of the substance/mixture and of the company/  
undertaking****1.3 Details of the supplier of the safety data sheet**

**Supplier** : ExxonMobil Petroleum & Chemical BV  
 POLDERDIJKWEG  
 Antwerpen B-2030 Belgium

**Supplier General Contact** : + 32 2 239 3111  
**e-mail address of person responsible for this SDS** : SDS-CC@exxonmobil.com

**SDS Internet Address** : www.sds.exxonmobil.com

**National contact**

ExxonMobil Chemical Ltd.  
 MAILPOINT 14  
 MARSH LANE  
 FAWLEY, SOUTHAMPTON  
 SO45 1TX HAMPSHIRE  
 Great Britain  
 +44 (0)23-8089-3822

**1.4 Emergency telephone number**

**National advisory body/  
Poison Centre** : (UK) 111

**24 Hour Emergency  
Telephone** : +44 20 3807 3798 / +1-703-527-3887 (CHEMTREC)

**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture**

**Product definition** : UVCB

**Classification according to UK CLP/GHS**

Asp. Tox. 1, H304

The product is classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

**2.2 Label elements**

**Hazard pictograms** :



**Signal word** : Danger

**Hazard statements** : H304 - May be fatal if swallowed and enters airways.

**Precautionary statements**

**Prevention** : Not applicable.

**Response** : P301 + P331, P310 - IF SWALLOWED: Do NOT induce vomiting. Immediately call a POISON CENTER or doctor.

**Storage** : P405 - Store locked up.

**Disposal** : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Hazardous ingredients** : Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics

**Supplemental label elements** : Repeated exposure may cause skin dryness or cracking.

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## SECTION 2: Hazards identification

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : 3

**Special packaging requirements**

**Containers to be fitted with child-resistant fastenings** : Not applicable.  
**Tactile warning of danger** : Not applicable.

### 2.3 Other hazards

**Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII** :

PBT	P	B	T	vPvB	vP	vB
No	N/A	N/A	No	N/A	N/A	N/A

**Other hazards which do not result in classification** : None known.

**Nota** : This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances : UVCB

Product/ingredient name	Identifiers	%	Classification	Type
distillates (petroleum), hydro-treated light	REACH #: 01-2119456620-43 EC: 926-141-6 CAS: -	100	Asp. Tox. 1, H304 EUH066  <b>See Section 16 for the full text of the H statements declared above.</b>	[1]

There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.

Type

[1] Constituent

Occupational exposure limits, if available, are listed in Section 8.

Note: Any entry in the EC# column that begins with the number "9" is a Provisional List Number provided by ECHA pending publication of the official EC Inventory Number for the substance. See Section 15 for additional CAS number information for the substance.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

**Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

**SECTION 4: First aid measures**

- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

**4.2 Most important symptoms and effects, both acute and delayed****Over-exposure signs/symptoms**

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : Local necrosis as evidenced by delayed onset of pain and tissue damage a few hours after injection.
- Ingestion** : Adverse symptoms may include the following:  
nausea or vomiting

**4.3 Indication of any immediate medical attention and special treatment needed**

- Notes to physician** : If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately.
- Specific treatments** : No specific treatment.

See toxicological information (Section 11)

**SECTION 5: Firefighting measures****5.1 Extinguishing media**

- Suitable extinguishing media** : Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

**5.2 Special hazards arising from the substance or mixture**

- Specific hazards arising from the chemical** : Combustible liquid. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapour/gas is heavier than air and will spread along the ground. Vapours may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.

## SECTION 5: Firefighting measures

**Hazardous combustion products** : Incomplete combustion products, Oxides of carbon, Smoke, Fume

### 5.3 Advice for firefighters

**Special protective actions for fire-fighters** : Use standard firefighting procedures and consider the hazards of other involved materials. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. Assure an extended cooling down period to prevent re-ignition. Prevent run-off from fire control or dilution from entering streams, sewers or drinking water supply. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## SECTION 6: Accidental release measures

### NOTIFICATION PROCEDURES

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

#### 6.1 Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Put on appropriate personal protective equipment. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate.

**For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

#### 6.2 Environmental precautions

: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

#### 6.3 Methods and material for containment and cleaning up

**Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Confine the spill immediately with booms. Remove from the surface by skimming or with suitable absorbents. Seek the advice of a specialist before using dispersants. Warn other shipping. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

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## SECTION 6: Accidental release measures

- 6.4 Reference to other sections** : See Section 1 for emergency contact information.  
 See Section 8 for information on appropriate personal protective equipment.  
 See Section 13 for additional waste treatment information.

## SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 7.1 Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- Static Accumulator** : This material is a static accumulator. A liquid is typically considered a nonconductive, static accumulator if its conductivity is below 100 pS/m (100x10E-12 Siemens per meter) and is considered a semiconductive, static accumulator if its conductivity is below 10,000 pS/m. Whether a liquid is nonconductive or semiconductive, the precautions are the same. A number of factors, for example liquid temperature, presence of contaminants, anti-static additives and filtration can greatly influence the conductivity of a liquid.
- Transport Temperature** : Ambient

### 7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

### Seveso Directive - Reporting thresholds

#### Named substances

Name	Notification and MAPP threshold	Safety report threshold
Petroleum products and alternative fuels (a) gasolines and naphthas, (b) kerosenes (including jet fuels), (c) gas oils (including diesel fuels, home heating oils and gas oil blending streams) (d) heavy fuel oils (e) alternative fuels serving the same purposes and with similar properties as regards flammability and environmental hazards as the products referred to in points (a) to (d)	2500 tonnes	25000 tonnes

**Storage Temperature** : Ambient

**Storage Pressure** : Ambient

**Suitable Containers/ Packing** : Barges, Drums, Tank Trucks, Railcars, Tank Cars

**Suitable Materials and Coatings** : Polyester, polyethylene, polypropylene, Teflon, Carbon Steel, Stainless Steel

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## SECTION 7: Handling and storage

**Unsuitable Materials and Coatings** : Natural Rubber, butyl rubber, Ethylene-propylene-diene monomer (EPDM), Polystyrene

### 7.3 Specific end use(s)

**Recommendations** : Not available.

**Industrial sector specific solutions** : Not available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limits

Product/ingredient name	Exposure limit values
distillates (petroleum), hydro- treated light	<b>ExxonMobil (COMPANY)</b> RCP - TWA: 164 ppm (Total Hydrocarbons). Form: Vapour.. RCP - TWA: 1200 mg/m <sup>3</sup> (Total Hydrocarbons). Form: Vapour..
distillates (petroleum), hydro- treated light	<b>ACGIH TLV (United States, 1/2025) [Kerosene]</b> Absorbed through skin. TWA 8 hours: 200 mg/m <sup>3</sup> (as total hydrocarbon vapor). <b>ExxonMobil (COMPANY)</b> TWA 8 hours: 165 ppm. Form: Vapour. TWA 8 hours: 1200 mg/m <sup>3</sup> . Form: Vapour.

NOTE: Limits/standards shown for guidance only. Follow applicable regulations.

**Recommended monitoring procedures** : Reference should be made to monitoring standards, such as the following: British Standard BS EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) British Standard BS EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) British Standard BS EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

#### DNELs/DMELs

Not available.

#### PNECs

Not available.

### 8.2 Exposure controls

**Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

#### Individual protection measures

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**SECTION 8: Exposure controls/personal protection**

- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. > 8 hours (breakthrough time): Nitrile, minimum 0.38 mm thickness or comparable protective barrier material  
CEN standards EN 420 and EN 374 provide general requirements and lists of glove types.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended: organic vapour filter (Type A)  
European Committee for Standardization (CEN) standards EN 136, 140 and 405 provide respirator masks and EN 149 and 143 provide filter recommendations.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**Section 9. Physical and chemical properties and safety characteristics**

**Note: Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Contact the Supplier for additional information.**

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

**9.1 Information on basic physical and chemical properties****Appearance**

- Physical state** : Liquid. [Clear]
- Colour** : Colourless
- Odour** : Slight
- Odour threshold** : Not available.
- pH** : Not applicable.
- Melting point/freezing point** : Not available.
- Boiling point or initial boiling point and boiling range** : 220 to 234°C (428 to 453.2°F) [ASTM D86]
- Flash point** : Closed cup: 89°C (192.2°F) [ASTM D-93]
- Evaporation rate** : 0.01 (butyl acetate = 1) [In-house method ,]
- Flammability** : Flammable liquids - Category 4
- Lower and upper explosive (flammable) limits** : Lower: 0.5% [Extrapolated]  
Upper: 5%

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## Section 9. Physical and chemical properties and safety characteristics

<b>Vapour pressure</b>	: 0.08 mm Hg [20 °C] [Calculated]
<b>Relative vapour density</b>	: 6.3 [Air = 1] [In-house method ,]
<b>Relative density</b>	: 0.81 [Calculated]
<b>Density</b>	: 0.81 g/cm <sup>3</sup> [15°C (59°F)] [ISO 12185]
<b>Solubility in water</b>	: Negligible
<b>Partition coefficient: n-octanol/ water</b>	: >4 [Estimated]
<b>Auto-ignition temperature</b>	: 219°C (426.2°F) [ASTM E659]
<b>Decomposition temperature</b>	: Not available.
<b>Viscosity</b>	: 2.44 cSt [25 °C]
<b>Molecular weight</b>	: 184
<b>Particle characteristics</b>	
<b>Median particle size</b>	: Not applicable.
<b>Pour point</b>	: -39°C [ASTM D5950]
<b>Hygroscopic</b>	: No
<b>Coefficient of Thermal Expansion</b>	: 0.00087 per Deg C

## SECTION 10: Stability and reactivity

<b>10.1 Reactivity</b>	: No specific test data related to reactivity available for this product or its ingredients.
<b>10.2 Chemical stability</b>	: The product is stable.
<b>10.3 Possibility of hazardous reactions</b>	: Under normal conditions of storage and use, hazardous reactions will not occur.
<b>10.4 Conditions to avoid</b>	: Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapour to accumulate in low or confined areas.
<b>10.5 Incompatible materials</b>	: Reactive or incompatible with the following materials:.,oxidising materials,Strong oxidisers
<b>10.6 Hazardous decomposition products</b>	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	<b>Rabbit - Dermal - LD50</b> >5000 mg/kg  <b>Rat - Oral - LD50</b> >5000 mg/kg  <b>Rat - Inhalation - LC50 Vapour</b> >5000 mg/m <sup>3</sup> [8 hours]

#### Conclusion/Summary

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## SECTION 11: Toxicological information

- Inhalation** : Minimally Toxic. Data available. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 403
- Dermal** : Minimally Toxic. Data available. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 402
- Oral** : Minimally Toxic. Data available. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 401

### Acute toxicity estimates

N/A

### Irritation/Corrosion

#### **Conclusion/Summary**

- Skin** : May dry the skin leading to discomfort and dermatitis. Data available. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 404
- Eyes** : May cause mild, short-lasting discomfort to eyes. Data available. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 405
- Respiratory** : Negligible hazard at ambient/normal handling temperatures. No end point data for material.

### Respiratory or skin sensitization

#### **Conclusion/Summary**

- Skin** : Not expected to be a skin sensitizer. Data available. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 406
- Respiratory** : Not expected to be a respiratory sensitizer. No end point data for material.

### Mutagenicity

#### **Conclusion/Summary**

- : Not expected to be a germ cell mutagen. Data available. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 471 473 474 476 478 479

### Carcinogenicity

#### **Conclusion/Summary**

- : Not expected to cause cancer. Data available. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 453

### Reproductive toxicity

#### **Conclusion/Summary**

- : Not expected to be a reproductive toxicant. Data available. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 413 414 415

### Specific target organ toxicity (single exposure)

#### **Conclusion/Summary**

- : Not expected to cause organ damage from a single exposure. No end point data for material.

### Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Target organs
distillates (petroleum), hydro- treated light	Not applicable.	-

#### **Conclusion/Summary**

- : Not expected to cause organ damage from prolonged or repeated exposure. Data available. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 408 413

### Aspiration hazard

Product/ingredient name	Result
distillates (petroleum), hydro- treated light	Category 1

#### **Conclusion/Summary**

- : May be fatal if swallowed and enters airways. Based on physico-chemical properties of the material. Data available.

**Information on likely routes of exposure** : Not available.

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## SECTION 11: Toxicological information

### Other information

- Product** : Vapour concentrations above recommended exposure levels are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, are anaesthetic and may have other central nervous system effects. Prolonged and/or repeated skin contact with low viscosity materials may defat the skin resulting in possible irritation and dermatitis. Small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema.

## Section 12. Ecological information

The information given is based on data for the material, components of the material, or for similar materials, through the application of bridging principals.

### 12.1 Toxicity

Product/ingredient name	Result
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	<b>Acute - EL0</b> Algae - <i>Pseudokirchneriella subcapitata</i> 1000 mg/l - data for the material [72 hours]
	<b>Acute - LL0</b> Fish - <i>Oncorhynchus mykiss</i> 1000 mg/l - data for the material [96 hours]
	<b>Acute - EL0</b> daphnia - <i>Daphnia magna</i> 1000 mg/l - data for the material [48 hours]

### Conclusion/Summary

- Acute toxicity** : Not expected to be harmful to aquatic organisms.  
**Chronic toxicity** : Not expected to demonstrate chronic toxicity to aquatic organisms

### 12.2 Persistence and degradability

Product/ingredient name	Result
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	Ready Biodegradability 69% [28 days]

- Biodegradability** : Material -- Available OECD 301F biodegradation data indicate that material is readily biodegradable (=60% in 28 days).  
**Hydrolysis** : Material -- Transformation due to hydrolysis not expected to be significant.  
**Photolysis** : Material -- Transformation due to photolysis not expected to be significant.  
**Atmospheric Oxidation** : Material -- Expected to degrade rapidly in air

### 12.3 Bioaccumulative potential

Not determined.

### 12.4 Mobility in soil

Not determined.

### 12.5 Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

### 12.6 Other adverse effects

**Other adverse effects** : No known significant effects or critical hazards.

**Nota** :

## SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 13.1 Waste treatment methods

#### Product

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

**Hazardous waste** : The classification of the product may meet the criteria for a hazardous waste.

#### Packaging

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

**Special precautions** : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

## SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
<b>14.1 UN number</b>	Not regulated.	9003	Not regulated.	Not regulated.
<b>14.2 UN proper shipping name</b>	-	SUBSTANCES WITH A FLASH-POINT ABOVE 60 °C AND NOT MORE THAN 100 °C (distillates (petroleum), hydro-treated light)	-	-
<b>14.3 Transport hazard class(es)</b>	-	9	-	-
<b>14.4 Packing group</b>	-	-	-	-
<b>14.5 Environmental hazards</b>	No.	No.	No.	No.

#### Additional information

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## SECTION 14: Transport information

**ADN** : The product is only regulated as a dangerous good when transported in tank vessels.  
F

**14.6 Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**14.7 Transport in bulk according to IMO instruments** : Not applicable.

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture UK (GB)/REACH

#### Annex XIV - List of substances subject to authorisation

##### Annex XIV

None of the components are listed.

##### Substances of very high concern

None of the components are listed.

##### Ozone depleting substances

Not listed.

##### Prior Informed Consent (PIC)

Not listed.

##### Persistent Organic Pollutants

Not listed.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : 3

##### Seveso Directive

This product is controlled under the Seveso Directive.

##### Named substances

###### Name

Petroleum products and alternative fuels (a) gasolines and naphthas, (b) kerosenes (including jet fuels), (c) gas oils (including diesel fuels, home heating oils and gas oil blending streams) (d) heavy fuel oils (e) alternative fuels serving the same purposes and with similar properties as regards flammability and environmental hazards as the products referred to in points (a) to (d)

##### National regulations

Product/ingredient name	List name	Name on list	Classification	Notes
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	ACGIH TLV	Kerosene	A3	-

##### EU regulations

EXXSOL™ D220/230

## SECTION 15: Regulatory information

**Industrial emissions (integrated pollution prevention and control) - Air** : Not listed

**Industrial emissions (integrated pollution prevention and control) - Water** : Not listed

### Inventory list

- Australia inventory (AIC)** : All components are listed or exempted.
- Canada inventory (DSL-NDSL)** : All components are listed or exempted.
- China inventory (IECSC)** : All components are listed or exempted.
- Japan inventory (CSCL)** : All components are listed or exempted.
- Japan inventory (Industrial Safety and Health Act)** : Not determined.
- New Zealand Inventory of Chemicals (NZIoC)** : All components are listed or exempted.
- Philippines inventory (PICCS)** : All components are listed or exempted.
- Korea inventory (KECI)** : All components are listed or exempted.
- Taiwan Chemical Substances Inventory (TCSI)** : All components are listed or exempted.
- United States inventory (TSCA 8b)** : All components are active or exempted.

The national inventory listings are based on the CAS number or numbers listed below.

64742-47-8

**15.2 Chemical safety assessment** : This product contains substances for which Chemical Safety Assessments are still required.

## SECTION 16: Other information

📌 Indicates information that has changed from previously issued version.

- Abbreviations and acronyms** :
- ATE = Acute Toxicity Estimate
  - GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019 No. 720 and amendments
  - DMEL = Derived Minimal Effect Level
  - DNEL = Derived No Effect Level
  - EUH statement = GB CLP-specific Hazard statement
  - N/A = Not available
  - PBT = Persistent, Bioaccumulative and Toxic
  - PNEC = Predicted No Effect Concentration
  - RRN = REACH Registration Number
  - SGG = Segregation Group
  - vPvB = Very Persistent and Very Bioaccumulative

### Procedure used to derive the classification

Classification	Justification
Asp. Tox. 1, H304	Calculation method

### Full text of abbreviated H statements

H304	May be fatal if swallowed and enters airways.
EUH066	Repeated exposure may cause skin dryness or cracking.

### Full text of classifications

Asp. Tox. 1	ASPIRATION HAZARD - Category 1
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**Date of issue/ Date of revision** : 29 April 2026

EXXSOL™ D220/230

## SECTION 16: Other information

**Date of previous issue** : 29 September 2025  
**Version** : 2.07  
**Product code** : 1168364

### Notice to reader

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## Annex to the extended Safety Data Sheet (eSDS)

Industrial

### Identification of the substance or mixture

Product definition : UVCB  
Code : 1168364  
Product name : PC FLUIDS EXXSOL D220/230 (EU)

### Section 1 - Title

Short title of the exposure scenario : Manufacture of substance  
List of use descriptors : **Identified use name:** Manufacture of substance  
**Process Category:** PROC01, PROC02, PROC03, PROC04, PROC08a, PROC08b, PROC15  
**Sector of end use:** SU03, SU08, SU09, SU10  
**Subsequent service life relevant for that use:** No.  
**Environmental Release Category:** ERC01, ERC04  
Environmental contributing scenarios : **General exposures -** ERC01, ERC04  
Health Contributing scenarios : **General measures applicable to all activities -** PROC01, PROC02, PROC03, PROC04, PROC08a, PROC08b, PROC15

<b>Processes and activities covered by the exposure scenario</b>	: Manufacture of the substance or use as an intermediate, process chemical or extracting agent. Includes recycling/ recovery, material transfers, storage, maintenance and loading (including marine vessel/barge, road/rail car and bulk container).
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### Section 2 - Exposure controls

#### Contributing scenario controlling environmental exposure for 1: General exposures

<b>Product characteristics</b>	: Not applicable.
<b>Amounts used</b>	: Not applicable.
<b>Frequency and duration of use</b>	: Not applicable.
<b>Environment factors not influenced by risk management</b>	: Not applicable.
<b>Other operational conditions of use affecting environmental exposure</b>	: Not applicable.
<b>Technical conditions and measures at process level (source) to prevent release</b>	: Not applicable.
<b>Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil</b>	: Not applicable.
<b>Organisational measures to prevent/limit release from site</b>	: Not applicable.
<b>Conditions and measures related to municipal sewage treatment plant</b>	: Not applicable.

**Conditions and measures related to external treatment of waste for disposal** : Not applicable.

**Conditions and measures related to external recovery of waste** : Not applicable.

### Contributing scenario controlling worker exposure for 2: General measures applicable to all activities

#### General measures (aspiration)

The H304 risk phrase (May be fatal if swallowed and enters airways) relates to potential for aspiration, a non-quantifiable hazard determined by physico-chemical properties (i.e. viscosity) that can occur during ingestion and also if it is vomited following ingestion. A DNEL cannot be derived. Risks from the physicochemical hazards of substances can be controlled by implementing risk management measures. For substances classified as H304, the following measures need to be implemented to control the aspiration hazard.

Product safety-related measures: Do not ingest. If swallowed then seek immediate medical assistance. Do not induce vomiting.

**Product characteristics** : Liquid

**Concentration of substance in mixture or article** : Covers percentage substance in the product up to 100 %.

**Frequency and duration of use/exposure** : Covers daily exposures up to 8 hours (unless stated differently)

#### Conditions and measures related to personal protection, hygiene and health evaluation

**Advice on general occupational hygiene** : Assumes a good basic standard of occupational hygiene is implemented

## Section 3 - Exposure estimation and reference to its source

**Website:** : Not applicable.

### Exposure estimation and reference to its source - Environment: 1: General exposures

**Exposure assessment (environment):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

### Exposure estimation and reference to its source - Workers: 2: General measures applicable to all activities

**Exposure assessment (human):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

## Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

**Environment** : Not applicable.

**Health** : Available hazard data do not support the need for a DNEL to be established for other health effects.  
Risk management measures are based on qualitative risk characterisation.

## Additional good practice advice beyond the REACH CSA

**Environment** : Not available.

**Health** : Not available.

## Annex to the extended Safety Data Sheet (eSDS)

Industrial

### Identification of the substance or mixture

Product definition : UVCB  
Code : 1168364  
Product name : PC FLUIDS EXXSOL D220/230 (EU)

### Section 1 - Title

Short title of the exposure scenario : Distribution of substance

List of use descriptors : **Identified use name:** Distribution of substance  
**Process Category:** PROC01, PROC02, PROC03, PROC04, PROC08a, PROC08b, PROC09, PROC15  
**Sector of end use:** SU03, SU08, SU09  
**Subsequent service life relevant for that use:** No.  
**Environmental Release Category:** ERC01, ERC02, ERC03, ERC04, ERC05, ERC06a, ERC06b, ERC06c, ERC06d, ERC07

Environmental contributing scenarios : **General exposures** - ERC01, ERC02, ERC03, ERC04, ERC05, ERC06a, ERC06b, ERC06c, ERC06d, ERC07

Health Contributing scenarios : **General measures applicable to all activities** - PROC01, PROC02, PROC03, PROC04, PROC08a, PROC08b, PROC09, PROC15

Processes and activities covered by the exposure scenario	: Loading (including marine vessel/barge, rail/road car and IBC loading) and repacking (including drums and small packs) of substance, including its sampling, storage, unloading distribution and associated laboratory activities.
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### Section 2 - Exposure controls

<b>Contributing scenario controlling environmental exposure for 1: General exposures</b>	
Product characteristics	: Not applicable.
Amounts used	: Not applicable.
Frequency and duration of use	: Not applicable.
Environment factors not influenced by risk management	: Not applicable.
Other operational conditions of use affecting environmental exposure	: Not applicable.
Technical conditions and measures at process level (source) to prevent release	: Not applicable.
Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil	: Not applicable.
Organisational measures to prevent/limit release from site	: Not applicable.
Conditions and measures related to municipal sewage treatment plant	: Not applicable.

**Conditions and measures related to external treatment of waste for disposal** : Not applicable.

**Conditions and measures related to external recovery of waste** : Not applicable.

### Contributing scenario controlling worker exposure for 2: General measures applicable to all activities

#### General measures (aspiration)

The H304 risk phrase (May be fatal if swallowed and enters airways) relates to potential for aspiration, a non-quantifiable hazard determined by physico-chemical properties (i.e. viscosity) that can occur during ingestion and also if it is vomited following ingestion. A DNEL cannot be derived. Risks from the physicochemical hazards of substances can be controlled by implementing risk management measures. For substances classified as H304, the following measures need to be implemented to control the aspiration hazard.

Product safety-related measures: Do not ingest. If swallowed then seek immediate medical assistance. Do not induce vomiting.

**Product characteristics** : Liquid

**Concentration of substance in mixture or article** : Covers percentage substance in the product up to 100 %.

**Frequency and duration of use/exposure** : Covers daily exposures up to 8 hours (unless stated differently)

#### Conditions and measures related to personal protection, hygiene and health evaluation

**Advice on general occupational hygiene** : Assumes a good basic standard of occupational hygiene is implemented

## Section 3 - Exposure estimation and reference to its source

**Website:** : Not applicable.

### Exposure estimation and reference to its source - Environment: 1: General exposures

**Exposure assessment (environment):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

### Exposure estimation and reference to its source - Workers: 2: General measures applicable to all activities

**Exposure assessment (human):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

## Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

**Environment** : Not applicable.

**Health** : Available hazard data do not support the need for a DNEL to be established for other health effects.  
Risk management measures are based on qualitative risk characterisation.

## Additional good practice advice beyond the REACH CSA

**Environment** : Not available.

**Health** : Not available.

## Annex to the extended Safety Data Sheet (eSDS)

Industrial

### Identification of the substance or mixture

Product definition : UVCB  
Code : 1168364  
Product name : PC FLUIDS EXXSOL D220/230 (EU)

### Section 1 - Title

Short title of the exposure scenario : Formulation and (re)packing of substances and mixtures

List of use descriptors : **Identified use name:** Formulation and (re)packing of substances and mixtures  
**Process Category:** PROC01, PROC02, PROC03, PROC04, PROC05, PROC08a, PROC08b, PROC09, PROC14, PROC15  
**Sector of end use:** SU03, SU10  
**Subsequent service life relevant for that use:** No.  
**Environmental Release Category:** ERC02

Environmental contributing scenarios : **General exposures - ERC02**

Health Contributing scenarios : **General measures applicable to all activities - PROC01, PROC02, PROC03, PROC04, PROC05, PROC08a, PROC08b, PROC09, PROC14, PROC15**

<b>Processes and activities covered by the exposure scenario</b>	: Formulation, packing and re-packing of the substance and its mixtures in batch or continuous operations, including storage, materials transfers, mixing, tableting, compression, pelletisation, extrusion, large and small scale packing, sampling, maintenance and associated laboratory activities.
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### Section 2 - Exposure controls

#### Contributing scenario controlling environmental exposure for 1: General exposures

<b>Product characteristics</b>	: Not applicable.
<b>Amounts used</b>	: Not applicable.
<b>Frequency and duration of use</b>	: Not applicable.
<b>Environment factors not influenced by risk management</b>	: Not applicable.
<b>Other operational conditions of use affecting environmental exposure</b>	: Not applicable.
<b>Technical conditions and measures at process level (source) to prevent release</b>	: Not applicable.
<b>Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil</b>	: Not applicable.
<b>Organisational measures to prevent/limit release from site</b>	: Not applicable.
<b>Conditions and measures related to municipal sewage treatment plant</b>	: Not applicable.

**Conditions and measures related to external treatment of waste for disposal** : Not applicable.

**Conditions and measures related to external recovery of waste** : Not applicable.

### Contributing scenario controlling worker exposure for 2: General measures applicable to all activities

#### General measures (aspiration)

The H304 risk phrase (May be fatal if swallowed and enters airways) relates to potential for aspiration, a non-quantifiable hazard determined by physico-chemical properties (i.e. viscosity) that can occur during ingestion and also if it is vomited following ingestion. A DNEL cannot be derived. Risks from the physicochemical hazards of substances can be controlled by implementing risk management measures. For substances classified as H304, the following measures need to be implemented to control the aspiration hazard.

Product safety-related measures: Do not ingest. If swallowed then seek immediate medical assistance. Do not induce vomiting.

**Product characteristics** : Liquid

**Concentration of substance in mixture or article** : Covers percentage substance in the product up to 100 %.

**Frequency and duration of use/exposure** : Covers daily exposures up to 8 hours (unless stated differently)

#### Conditions and measures related to personal protection, hygiene and health evaluation

**Advice on general occupational hygiene** : Assumes a good basic standard of occupational hygiene is implemented

## Section 3 - Exposure estimation and reference to its source

**Website:** : Not applicable.

### Exposure estimation and reference to its source - Environment: 1: General exposures

**Exposure assessment (environment):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

### Exposure estimation and reference to its source - Workers: 2: General measures applicable to all activities

**Exposure assessment (human):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

## Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

**Environment** : Not applicable.

**Health** : Available hazard data do not support the need for a DNEL to be established for other health effects.  
Risk management measures are based on qualitative risk characterisation.

## Additional good practice advice beyond the REACH CSA

**Environment** : Not available.

**Health** : Not available.

## Annex to the extended Safety Data Sheet (eSDS)

Industrial

### Identification of the substance or mixture

Product definition : UVCB  
Code : 1168364  
Product name : PC FLUIDS EXXSOL D220/230 (EU)

### Section 1 - Title

Short title of the exposure scenario : Use in coatings - Industrial  
List of use descriptors : **Identified use name:** Use in coatings - Industrial  
**Process Category:** PROC01, PROC02, PROC03, PROC04, PROC05, PROC07, PROC08a, PROC08b, PROC10, PROC13, PROC15  
**Sector of end use:** SU03  
**Subsequent service life relevant for that use:** No.  
**Environmental Release Category:** ERC04  
Environmental contributing scenarios : **General exposures - ERC04**  
Health Contributing scenarios : **General measures applicable to all activities - PROC01, PROC02, PROC03, PROC04, PROC05, PROC07, PROC08a, PROC08b, PROC10, PROC13, PROC15**

<b>Processes and activities covered by the exposure scenario</b>	: Covers the use in coatings (paints, inks, adhesives, etc) including exposures during use (including materials receipt, storage, preparation and transfer from bulk and semi-bulk, application by spray, roller, spreader, dip, flow, fluidised bed on production lines and film formation) and equipment cleaning, maintenance and associated laboratory activities.
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### Section 2 - Exposure controls

<b>Contributing scenario controlling environmental exposure for 1: General exposures</b>	
<b>Product characteristics</b>	: Not applicable.
<b>Amounts used</b>	: Not applicable.
<b>Frequency and duration of use</b>	: Not applicable.
<b>Environment factors not influenced by risk management</b>	: Not applicable.
<b>Other operational conditions of use affecting environmental exposure</b>	: Not applicable.
<b>Technical conditions and measures at process level (source) to prevent release</b>	: Not applicable.
<b>Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil</b>	: Not applicable.
<b>Organisational measures to prevent/limit release from site</b>	: Not applicable.
<b>Conditions and measures related to municipal sewage treatment plant</b>	: Not applicable.

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**Conditions and measures related to external treatment of waste for disposal** : Not applicable.

**Conditions and measures related to external recovery of waste** : Not applicable.

### Contributing scenario controlling worker exposure for 2: General measures applicable to all activities

#### General measures (aspiration)

The H304 risk phrase (May be fatal if swallowed and enters airways) relates to potential for aspiration, a non-quantifiable hazard determined by physico-chemical properties (i.e. viscosity) that can occur during ingestion and also if it is vomited following ingestion. A DNEL cannot be derived. Risks from the physicochemical hazards of substances can be controlled by implementing risk management measures. For substances classified as H304, the following measures need to be implemented to control the aspiration hazard.

Product safety-related measures: Do not ingest. If swallowed then seek immediate medical assistance. Do not induce vomiting.

**Product characteristics** : Liquid

**Concentration of substance in mixture or article** : Covers percentage substance in the product up to 100 %.

**Frequency and duration of use/exposure** : Covers daily exposures up to 8 hours (unless stated differently)

#### Conditions and measures related to personal protection, hygiene and health evaluation

**Advice on general occupational hygiene** : Assumes a good basic standard of occupational hygiene is implemented

## Section 3 - Exposure estimation and reference to its source

**Website:** : Not applicable.

### Exposure estimation and reference to its source - Environment: 1: General exposures

**Exposure assessment (environment):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

### Exposure estimation and reference to its source - Workers: 2: General measures applicable to all activities

**Exposure assessment (human):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

## Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

**Environment** : Not applicable.

**Health** : Available hazard data do not support the need for a DNEL to be established for other health effects.  
Risk management measures are based on qualitative risk characterisation.

## Additional good practice advice beyond the REACH CSA

**Environment** : Not available.

**Health** : Not available.

## Annex to the extended Safety Data Sheet (eSDS)

Industrial

### Identification of the substance or mixture

Product definition : UVCB  
Code : 1168364  
Product name : PC FLUIDS EXXSOL D220/230 (EU)

### Section 1 - Title

Short title of the exposure scenario : Use in cleaning agents - Industrial  
List of use descriptors : **Identified use name:** Use in cleaning agents - Industrial  
**Process Category:** PROC01, PROC02, PROC03, PROC04, PROC07, PROC08a, PROC08b, PROC10, PROC13  
**Sector of end use:** SU03  
**Subsequent service life relevant for that use:** No.  
**Environmental Release Category:** ERC04  
Environmental contributing scenarios : **General exposures - ERC04**  
Health Contributing scenarios : **General measures applicable to all activities - PROC01, PROC02, PROC03, PROC04, PROC07, PROC08a, PROC08b, PROC10, PROC13**

<b>Processes and activities covered by the exposure scenario</b>	: Covers the use as a component of cleaning products including transfer from storage, pouring/unloading from drums or containers. Exposures during mixing/diluting in the preparatory phase and cleaning activities (including spraying, brushing, dipping, wiping, automated and by hand), related equipment cleaning and maintenance.
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### Section 2 - Exposure controls

<b>Contributing scenario controlling environmental exposure for 1: General exposures</b>	
<b>Product characteristics</b>	: Not applicable.
<b>Amounts used</b>	: Not applicable.
<b>Frequency and duration of use</b>	: Not applicable.
<b>Environment factors not influenced by risk management</b>	: Not applicable.
<b>Other operational conditions of use affecting environmental exposure</b>	: Not applicable.
<b>Technical conditions and measures at process level (source) to prevent release</b>	: Not applicable.
<b>Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil</b>	: Not applicable.
<b>Organisational measures to prevent/limit release from site</b>	: Not applicable.
<b>Conditions and measures related to municipal sewage treatment plant</b>	: Not applicable.

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**Conditions and measures related to external treatment of waste for disposal** : Not applicable.

**Conditions and measures related to external recovery of waste** : Not applicable.

### Contributing scenario controlling worker exposure for 2: General measures applicable to all activities

#### General measures (aspiration)

The H304 risk phrase (May be fatal if swallowed and enters airways) relates to potential for aspiration, a non-quantifiable hazard determined by physico-chemical properties (i.e. viscosity) that can occur during ingestion and also if it is vomited following ingestion. A DNEL cannot be derived. Risks from the physicochemical hazards of substances can be controlled by implementing risk management measures. For substances classified as H304, the following measures need to be implemented to control the aspiration hazard.

Product safety-related measures: Do not ingest. If swallowed then seek immediate medical assistance. Do not induce vomiting.

**Product characteristics** : Liquid

**Concentration of substance in mixture or article** : Covers percentage substance in the product up to 100 %.

**Frequency and duration of use/exposure** : Covers daily exposures up to 8 hours (unless stated differently)

#### Conditions and measures related to personal protection, hygiene and health evaluation

**Advice on general occupational hygiene** : Assumes a good basic standard of occupational hygiene is implemented

## Section 3 - Exposure estimation and reference to its source

**Website:** : Not applicable.

### Exposure estimation and reference to its source - Environment: 1: General exposures

**Exposure assessment (environment):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

### Exposure estimation and reference to its source - Workers: 2: General measures applicable to all activities

**Exposure assessment (human):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

## Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

**Environment** : Not applicable.

**Health** : Available hazard data do not support the need for a DNEL to be established for other health effects.  
Risk management measures are based on qualitative risk characterisation.

## Additional good practice advice beyond the REACH CSA

**Environment** : Not available.

**Health** : Not available.

## Annex to the extended Safety Data Sheet (eSDS)

Industrial

### Identification of the substance or mixture

Product definition : UVCB  
Code : 1168364  
Product name : PC FLUIDS EXXSOL D220/230 (EU)

### Section 1 - Title

Short title of the exposure scenario : Lubricants - Industrial

List of use descriptors : **Identified use name:** Lubricants - Industrial  
**Process Category:** PROC01, PROC02, PROC03, PROC04, PROC07, PROC08a, PROC08b, PROC09, PROC10, PROC13, PROC17, PROC18  
**Sector of end use:** SU03  
**Subsequent service life relevant for that use:** No.  
**Environmental Release Category:** ERC04, ERC07

Environmental contributing scenarios : **General exposures -** ERC04, ERC07

Health Contributing scenarios : **General measures applicable to all activities -** PROC01, PROC02, PROC03, PROC04, PROC07, PROC08a, PROC08b, PROC09, PROC10, PROC13, PROC17, PROC18

Processes and activities covered by the exposure scenario	: Covers the use of formulated lubricants in closed and open systems including transfer operations, operation of machinery/engines and similar articles, reworking on reject articles, equipment maintenance and disposal of wastes.
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### Section 2 - Exposure controls

#### Contributing scenario controlling environmental exposure for 1: General exposures

Product characteristics : Not applicable.

Amounts used : Not applicable.

Frequency and duration of use : Not applicable.

Environment factors not influenced by risk management : Not applicable.

Other operational conditions of use affecting environmental exposure : Not applicable.

Technical conditions and measures at process level (source) to prevent release : Not applicable.

Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil : Not applicable.

Organisational measures to prevent/limit release from site : Not applicable.

Conditions and measures related to municipal sewage treatment plant : Not applicable.

**Conditions and measures related to external treatment of waste for disposal** : Not applicable.

**Conditions and measures related to external recovery of waste** : Not applicable.

### Contributing scenario controlling worker exposure for 2: General measures applicable to all activities

#### General measures (aspiration)

The H304 risk phrase (May be fatal if swallowed and enters airways) relates to potential for aspiration, a non-quantifiable hazard determined by physico-chemical properties (i.e. viscosity) that can occur during ingestion and also if it is vomited following ingestion. A DNEL cannot be derived. Risks from the physicochemical hazards of substances can be controlled by implementing risk management measures. For substances classified as H304, the following measures need to be implemented to control the aspiration hazard.

Product safety-related measures: Do not ingest. If swallowed then seek immediate medical assistance. Do not induce vomiting.

**Product characteristics** : Liquid

**Concentration of substance in mixture or article** : Covers percentage substance in the product up to 100 %.

**Frequency and duration of use/exposure** : Covers daily exposures up to 8 hours (unless stated differently)

#### Conditions and measures related to personal protection, hygiene and health evaluation

**Advice on general occupational hygiene** : Assumes a good basic standard of occupational hygiene is implemented

## Section 3 - Exposure estimation and reference to its source

**Website:** : Not applicable.

### Exposure estimation and reference to its source - Environment: 1: General exposures

**Exposure assessment (environment):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

### Exposure estimation and reference to its source - Workers: 2: General measures applicable to all activities

**Exposure assessment (human):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

## Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

**Environment** : Not applicable.

**Health** : Available hazard data do not support the need for a DNEL to be established for other health effects.  
Risk management measures are based on qualitative risk characterisation.

## Additional good practice advice beyond the REACH CSA

**Environment** : Not available.

**Health** : Not available.

## Annex to the extended Safety Data Sheet (eSDS)

Industrial

### Identification of the substance or mixture

Product definition : UVCB  
Code : 1168364  
Product name : PC FLUIDS EXXSOL D220/230 (EU)

### Section 1 - Title

Short title of the exposure scenario : Use in metal working fluids/rolling oils - Industrial

List of use descriptors : **Identified use name:** Use in metal working fluids/rolling oils - Industrial  
**Process Category:** PROC01, PROC02, PROC03, PROC04, PROC05, PROC07, PROC08a, PROC08b, PROC09, PROC10, PROC13, PROC17  
**Sector of end use:** SU03  
**Subsequent service life relevant for that use:** No.  
**Environmental Release Category:** ERC04

Environmental contributing scenarios : **General exposures - ERC04**

Health Contributing scenarios : **General measures applicable to all activities - PROC01, PROC02, PROC03, PROC04, PROC05, PROC07, PROC08a, PROC08b, PROC09, PROC10, PROC13, PROC17**

Processes and activities covered by the exposure scenario	: Covers the use in formulated MWFs/rolling oils including transfer operations, rolling and annealing activities, cutting/machining activities, automated and manual application of corrosion protections (including brushing, dipping and spraying), equipment maintenance, draining and disposal of waste oils.
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### Section 2 - Exposure controls

<b>Contributing scenario controlling environmental exposure for 1: General exposures</b>	
Product characteristics	: Not applicable.
Amounts used	: Not applicable.
Frequency and duration of use	: Not applicable.
Environment factors not influenced by risk management	: Not applicable.
Other operational conditions of use affecting environmental exposure	: Not applicable.
Technical conditions and measures at process level (source) to prevent release	: Not applicable.
Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil	: Not applicable.
Organisational measures to prevent/limit release from site	: Not applicable.
Conditions and measures related to municipal sewage treatment plant	: Not applicable.

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**Conditions and measures related to external treatment of waste for disposal** : Not applicable.

**Conditions and measures related to external recovery of waste** : Not applicable.

### Contributing scenario controlling worker exposure for 2: General measures applicable to all activities

#### General measures (aspiration)

The H304 risk phrase (May be fatal if swallowed and enters airways) relates to potential for aspiration, a non-quantifiable hazard determined by physico-chemical properties (i.e. viscosity) that can occur during ingestion and also if it is vomited following ingestion. A DNEL cannot be derived. Risks from the physicochemical hazards of substances can be controlled by implementing risk management measures. For substances classified as H304, the following measures need to be implemented to control the aspiration hazard.

Product safety-related measures: Do not ingest. If swallowed then seek immediate medical assistance. Do not induce vomiting.

**Product characteristics** : Liquid

**Concentration of substance in mixture or article** : Covers percentage substance in the product up to 100 %.

**Frequency and duration of use/exposure** : Covers daily exposures up to 8 hours (unless stated differently)

#### Conditions and measures related to personal protection, hygiene and health evaluation

**Advice on general occupational hygiene** : Assumes a good basic standard of occupational hygiene is implemented

## Section 3 - Exposure estimation and reference to its source

**Website:** : Not applicable.

### Exposure estimation and reference to its source - Environment: 1: General exposures

**Exposure assessment (environment):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

### Exposure estimation and reference to its source - Workers: 2: General measures applicable to all activities

**Exposure assessment (human):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

## Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

**Environment** : Not applicable.

**Health** : Available hazard data do not support the need for a DNEL to be established for other health effects.  
Risk management measures are based on qualitative risk characterisation.

## Additional good practice advice beyond the REACH CSA

**Environment** : Not available.

**Health** : Not available.

## Annex to the extended Safety Data Sheet (eSDS)

Industrial

### Identification of the substance or mixture

Product definition : UVCB  
Code : 1168364  
Product name : PC FLUIDS EXXSOL D220/230 (EU)

### Section 1 - Title

Short title of the exposure scenario : Use as binders and release agents - Industrial

List of use descriptors : **Identified use name:** Use as binders and release agents - Industrial  
**Process Category:** PROC01, PROC02, PROC03, PROC04, PROC06, PROC07, PROC08a, PROC08b, PROC10, PROC13, PROC14  
**Sector of end use:** SU03  
**Subsequent service life relevant for that use:** No.  
**Environmental Release Category:** ERC04

Environmental contributing scenarios : **General exposures - ERC04**

Health Contributing scenarios : **General measures applicable to all activities - PROC01, PROC02, PROC03, PROC04, PROC06, PROC07, PROC08a, PROC08b, PROC10, PROC13, PROC14**

Processes and activities covered by the exposure scenario	: Covers the use as binders and release agents including material transfers, mixing, application (including spraying and brushing), mould forming and casting, and handling of waste.
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### Section 2 - Exposure controls

#### Contributing scenario controlling environmental exposure for 1: General exposures

Product characteristics : Not applicable.

Amounts used : Not applicable.

Frequency and duration of use : Not applicable.

Environment factors not influenced by risk management : Not applicable.

Other operational conditions of use affecting environmental exposure : Not applicable.

Technical conditions and measures at process level (source) to prevent release : Not applicable.

Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil : Not applicable.

Organisational measures to prevent/limit release from site : Not applicable.

Conditions and measures related to municipal sewage treatment plant : Not applicable.

**Conditions and measures related to external treatment of waste for disposal** : Not applicable.

**Conditions and measures related to external recovery of waste** : Not applicable.

### Contributing scenario controlling worker exposure for 2: General measures applicable to all activities

#### General measures (aspiration)

The H304 risk phrase (May be fatal if swallowed and enters airways) relates to potential for aspiration, a non-quantifiable hazard determined by physico-chemical properties (i.e. viscosity) that can occur during ingestion and also if it is vomited following ingestion. A DNEL cannot be derived. Risks from the physicochemical hazards of substances can be controlled by implementing risk management measures. For substances classified as H304, the following measures need to be implemented to control the aspiration hazard.

Product safety-related measures: Do not ingest. If swallowed then seek immediate medical assistance. Do not induce vomiting.

**Product characteristics** : Liquid

**Concentration of substance in mixture or article** : Covers percentage substance in the product up to 100 %.

**Frequency and duration of use/exposure** : Covers daily exposures up to 8 hours (unless stated differently)

#### Conditions and measures related to personal protection, hygiene and health evaluation

**Advice on general occupational hygiene** : Assumes a good basic standard of occupational hygiene is implemented

## Section 3 - Exposure estimation and reference to its source

**Website:** : Not applicable.

### Exposure estimation and reference to its source - Environment: 1: General exposures

**Exposure assessment (environment):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

### Exposure estimation and reference to its source - Workers: 2: General measures applicable to all activities

**Exposure assessment (human):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

## Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

**Environment** : Not applicable.

**Health** : Available hazard data do not support the need for a DNEL to be established for other health effects.  
Risk management measures are based on qualitative risk characterisation.

## Additional good practice advice beyond the REACH CSA

**Environment** : Not available.

**Health** : Not available.

## Annex to the extended Safety Data Sheet (eSDS)

Industrial

### Identification of the substance or mixture

Product definition : UVCB  
Code : 1168364  
Product name : PC FLUIDS EXXSOL D220/230 (EU)

### Section 1 - Title

Short title of the exposure scenario : Use as a fuel - Industrial  
List of use descriptors : **Identified use name:** Use as a fuel - Industrial  
**Process Category:** PROC01, PROC02, PROC03, PROC08a, PROC08b, PROC16  
**Sector of end use:** SU03  
**Subsequent service life relevant for that use:** No.  
**Environmental Release Category:** ERC07  
Environmental contributing scenarios : **General exposures - ERC07**  
Health Contributing scenarios : **General measures applicable to all activities - PROC01, PROC02, PROC03, PROC08a, PROC08b, PROC16**

<b>Processes and activities covered by the exposure scenario</b>	: Covers the use as a fuel (or fuel additive) and includes activities associated with its transfer, use, equipment maintenance and handling of waste.
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### Section 2 - Exposure controls

#### Contributing scenario controlling environmental exposure for 1: General exposures

<b>Product characteristics</b>	: Not applicable.
<b>Amounts used</b>	: Not applicable.
<b>Frequency and duration of use</b>	: Not applicable.
<b>Environment factors not influenced by risk management</b>	: Not applicable.
<b>Other operational conditions of use affecting environmental exposure</b>	: Not applicable.
<b>Technical conditions and measures at process level (source) to prevent release</b>	: Not applicable.
<b>Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil</b>	: Not applicable.
<b>Organisational measures to prevent/limit release from site</b>	: Not applicable.
<b>Conditions and measures related to municipal sewage treatment plant</b>	: Not applicable.
<b>Conditions and measures related to external treatment of waste for disposal</b>	: Not applicable.

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**Conditions and measures related to external recovery of waste** : Not applicable.

### Contributing scenario controlling worker exposure for 2: General measures applicable to all activities

#### General measures (aspiration)

The H304 risk phrase (May be fatal if swallowed and enters airways) relates to potential for aspiration, a non-quantifiable hazard determined by physico-chemical properties (i.e. viscosity) that can occur during ingestion and also if it is vomited following ingestion. A DNEL cannot be derived. Risks from the physicochemical hazards of substances can be controlled by implementing risk management measures. For substances classified as H304, the following measures need to be implemented to control the aspiration hazard.

Product safety-related measures: Do not ingest. If swallowed then seek immediate medical assistance. Do not induce vomiting.

**Product characteristics** : Liquid

**Concentration of substance in mixture or article** : Covers percentage substance in the product up to 100 %.

**Frequency and duration of use/exposure** : Covers daily exposures up to 8 hours (unless stated differently)

#### Conditions and measures related to personal protection, hygiene and health evaluation

**Advice on general occupational hygiene** : Assumes a good basic standard of occupational hygiene is implemented

## Section 3 - Exposure estimation and reference to its source

**Website:** : Not applicable.

### Exposure estimation and reference to its source - Environment: 1: General exposures

**Exposure assessment (environment):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

### Exposure estimation and reference to its source - Workers: 2: General measures applicable to all activities

**Exposure assessment (human):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

## Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

**Environment** : Not applicable.

**Health** : Available hazard data do not support the need for a DNEL to be established for other health effects.  
Risk management measures are based on qualitative risk characterisation.

## Additional good practice advice beyond the REACH CSA

**Environment** : Not available.

**Health** : Not available.

## Annex to the extended Safety Data Sheet (eSDS)

Industrial

### Identification of the substance or mixture

Product definition : UVCB  
Code : 1168364  
Product name : PC FLUIDS EXXSOL D220/230 (EU)

### Section 1 - Title

Short title of the exposure scenario : Functional fluids - Industrial

List of use descriptors : **Identified use name:** Functional fluids - Industrial  
**Process Category:** PROC01, PROC02, PROC03, PROC04, PROC08a, PROC08b, PROC09  
**Sector of end use:** SU03  
**Subsequent service life relevant for that use:** No.  
**Environmental Release Category:** ERC07

Environmental contributing scenarios : **General exposures - ERC07**

Health Contributing scenarios : **General measures applicable to all activities - PROC01, PROC02, PROC03, PROC04, PROC08a, PROC08b, PROC09**

**Processes and activities covered by the exposure scenario** : Use as functional fluids e.g. cable oils, transfer oils, coolants, insulators, refrigerants, hydraulic fluids in industrial equipment including maintenance and related material transfers.

### Section 2 - Exposure controls

**Contributing scenario controlling environmental exposure for 1: General exposures**

Product characteristics : Not applicable.

Amounts used : Not applicable.

Frequency and duration of use : Not applicable.

Environment factors not influenced by risk management : Not applicable.

Other operational conditions of use affecting environmental exposure : Not applicable.

Technical conditions and measures at process level (source) to prevent release : Not applicable.

Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil : Not applicable.

Organisational measures to prevent/limit release from site : Not applicable.

Conditions and measures related to municipal sewage treatment plant : Not applicable.

**Conditions and measures related to external treatment of waste for disposal** : Not applicable.

**Conditions and measures related to external recovery of waste** : Not applicable.

### Contributing scenario controlling worker exposure for 2: General measures applicable to all activities

#### General measures (aspiration)

The H304 risk phrase (May be fatal if swallowed and enters airways) relates to potential for aspiration, a non-quantifiable hazard determined by physico-chemical properties (i.e. viscosity) that can occur during ingestion and also if it is vomited following ingestion. A DNEL cannot be derived. Risks from the physicochemical hazards of substances can be controlled by implementing risk management measures. For substances classified as H304, the following measures need to be implemented to control the aspiration hazard.

Product safety-related measures: Do not ingest. If swallowed then seek immediate medical assistance. Do not induce vomiting.

**Product characteristics** : Liquid

**Concentration of substance in mixture or article** : Covers percentage substance in the product up to 100 %.

**Frequency and duration of use/exposure** : Covers daily exposures up to 8 hours (unless stated differently)

#### Conditions and measures related to personal protection, hygiene and health evaluation

**Advice on general occupational hygiene** : Assumes a good basic standard of occupational hygiene is implemented

## Section 3 - Exposure estimation and reference to its source

**Website:** : Not applicable.

### Exposure estimation and reference to its source - Environment: 1: General exposures

**Exposure assessment (environment):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

### Exposure estimation and reference to its source - Workers: 2: General measures applicable to all activities

**Exposure assessment (human):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

## Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

**Environment** : Not applicable.

**Health** : Available hazard data do not support the need for a DNEL to be established for other health effects.  
Risk management measures are based on qualitative risk characterisation.

## Additional good practice advice beyond the REACH CSA

**Environment** : Not available.

**Health** : Not available.

## Annex to the extended Safety Data Sheet (eSDS)

Industrial

### Identification of the substance or mixture

Product definition : UVCB  
Code : 1168364  
Product name : PC FLUIDS EXXSOL D220/230 (EU)

### Section 1 - Title

Short title of the exposure scenario : Use in laboratories - Industrial  
List of use descriptors : **Identified use name:** Use in laboratories - Industrial  
**Process Category:** PROC15  
**Sector of end use:** SU03  
**Subsequent service life relevant for that use:** No.  
**Environmental Release Category:** ERC04  
Environmental contributing scenarios : **General exposures - ERC04**  
Health Contributing scenarios : **General measures applicable to all activities - PROC15**

Processes and activities covered by the exposure scenario	: Use of the substance within laboratory settings, including material transfers and equipment cleaning
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### Section 2 - Exposure controls

#### Contributing scenario controlling environmental exposure for 1: General exposures

Product characteristics	: Not applicable.
Amounts used	: Not applicable.
Frequency and duration of use	: Not applicable.
Environment factors not influenced by risk management	: Not applicable.
Other operational conditions of use affecting environmental exposure	: Not applicable.
Technical conditions and measures at process level (source) to prevent release	: Not applicable.
Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil	: Not applicable.
Organisational measures to prevent/limit release from site	: Not applicable.
Conditions and measures related to municipal sewage treatment plant	: Not applicable.
Conditions and measures related to external treatment of waste for disposal	: Not applicable.

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**Conditions and measures related to external recovery of waste** : Not applicable.

### Contributing scenario controlling worker exposure for 2: General measures applicable to all activities

#### General measures (aspiration)

The H304 risk phrase (May be fatal if swallowed and enters airways) relates to potential for aspiration, a non-quantifiable hazard determined by physico-chemical properties (i.e. viscosity) that can occur during ingestion and also if it is vomited following ingestion. A DNEL cannot be derived. Risks from the physicochemical hazards of substances can be controlled by implementing risk management measures. For substances classified as H304, the following measures need to be implemented to control the aspiration hazard.

Product safety-related measures: Do not ingest. If swallowed then seek immediate medical assistance. Do not induce vomiting.

**Product characteristics** : Liquid

**Concentration of substance in mixture or article** : Covers percentage substance in the product up to 100 %.

**Frequency and duration of use/exposure** : Covers daily exposures up to 8 hours (unless stated differently)

#### Conditions and measures related to personal protection, hygiene and health evaluation

**Advice on general occupational hygiene** : Assumes a good basic standard of occupational hygiene is implemented

## Section 3 - Exposure estimation and reference to its source

**Website:** : Not applicable.

### Exposure estimation and reference to its source - Environment: 1: General exposures

**Exposure assessment (environment):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

### Exposure estimation and reference to its source - Workers: 2: General measures applicable to all activities

**Exposure assessment (human):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

## Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

**Environment** : Not applicable.

**Health** : Available hazard data do not support the need for a DNEL to be established for other health effects.  
Risk management measures are based on qualitative risk characterisation.

## Additional good practice advice beyond the REACH CSA

**Environment** : Not available.

**Health** : Not available.

## Annex to the extended Safety Data Sheet (eSDS)

Industrial

### Identification of the substance or mixture

Product definition : UVCB  
Code : 1168364  
Product name : PC FLUIDS EXXSOL D220/230 (EU)

### Section 1 - Title

Short title of the exposure scenario : Polymer processing - Industrial

List of use descriptors : **Identified use name:** Polymer processing - Industrial  
**Process Category:** PROC01, PROC02, PROC03, PROC04, PROC05, PROC06, PROC08a, PROC08b, PROC09, PROC13, PROC14, PROC21  
**Sector of end use:** SU03, SU10  
**Subsequent service life relevant for that use:** No.  
**Environmental Release Category:** ERC04

Environmental contributing scenarios : **General exposures - ERC04**

Health Contributing scenarios : **General measures applicable to all activities - PROC01, PROC02, PROC03, PROC04, PROC05, PROC06, PROC08a, PROC08b, PROC09, PROC13, PROC14, PROC21**

<b>Processes and activities covered by the exposure scenario</b>	: Processing of formulated polymers including material transfers, additives handling (e.g. pigments, stabilisers, fillers, plasticisers, etc.), moulding, curing and forming activities, material re-works, storage and associated maintenance.
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### Section 2 - Exposure controls

<b>Contributing scenario controlling environmental exposure for 1: General exposures</b>	
<b>Product characteristics</b>	: Not applicable.
<b>Amounts used</b>	: Not applicable.
<b>Frequency and duration of use</b>	: Not applicable.
<b>Environment factors not influenced by risk management</b>	: Not applicable.
<b>Other operational conditions of use affecting environmental exposure</b>	: Not applicable.
<b>Technical conditions and measures at process level (source) to prevent release</b>	: Not applicable.
<b>Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil</b>	: Not applicable.
<b>Organisational measures to prevent/limit release from site</b>	: Not applicable.
<b>Conditions and measures related to municipal sewage treatment plant</b>	: Not applicable.

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**Conditions and measures related to external treatment of waste for disposal** : Not applicable.

**Conditions and measures related to external recovery of waste** : Not applicable.

### Contributing scenario controlling worker exposure for 2: General measures applicable to all activities

#### General measures (aspiration)

The H304 risk phrase (May be fatal if swallowed and enters airways) relates to potential for aspiration, a non-quantifiable hazard determined by physico-chemical properties (i.e. viscosity) that can occur during ingestion and also if it is vomited following ingestion. A DNEL cannot be derived. Risks from the physicochemical hazards of substances can be controlled by implementing risk management measures. For substances classified as H304, the following measures need to be implemented to control the aspiration hazard.

Product safety-related measures: Do not ingest. If swallowed then seek immediate medical assistance. Do not induce vomiting.

**Product characteristics** : Liquid

**Concentration of substance in mixture or article** : Covers percentage substance in the product up to 100 %.

**Frequency and duration of use/exposure** : Covers daily exposures up to 8 hours (unless stated differently)

#### Conditions and measures related to personal protection, hygiene and health evaluation

**Advice on general occupational hygiene** : Assumes a good basic standard of occupational hygiene is implemented

## Section 3 - Exposure estimation and reference to its source

**Website:** : Not applicable.

### Exposure estimation and reference to its source - Environment: 1: General exposures

**Exposure assessment (environment):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

### Exposure estimation and reference to its source - Workers: 2: General measures applicable to all activities

**Exposure assessment (human):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

## Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

**Environment** : Not applicable.

**Health** : Available hazard data do not support the need for a DNEL to be established for other health effects.  
Risk management measures are based on qualitative risk characterisation.

## Additional good practice advice beyond the REACH CSA

**Environment** : Not available.

**Health** : Not available.

## Annex to the extended Safety Data Sheet (eSDS)

Industrial

### Identification of the substance or mixture

Product definition : UVCB  
Code : 1168364  
Product name : PC FLUIDS EXXSOL D220/230 (EU)

### Section 1 - Title

Short title of the exposure scenario : Water treatment chemicals - Industrial

List of use descriptors : **Identified use name:** Water treatment chemicals - Industrial  
**Process Category:** PROC01, PROC02, PROC03, PROC04, PROC08a, PROC08b, PROC13  
**Sector of end use:** SU03  
**Subsequent service life relevant for that use:** No.  
**Environmental Release Category:** ERC03, ERC04

Environmental contributing scenarios : **General exposures** - ERC03, ERC04

Health Contributing scenarios : **General measures applicable to all activities** - PROC01, PROC02, PROC03, PROC04, PROC08a, PROC08b, PROC13

Processes and activities covered by the exposure scenario : Covers the use of the substance for the treatment of water at industrial facilities in open and closed systems.

### Section 2 - Exposure controls

#### Contributing scenario controlling environmental exposure for 1: General exposures

Product characteristics : Not applicable.

Amounts used : Not applicable.

Frequency and duration of use : Not applicable.

Environment factors not influenced by risk management : Not applicable.

Other operational conditions of use affecting environmental exposure : Not applicable.

Technical conditions and measures at process level (source) to prevent release : Not applicable.

Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil : Not applicable.

Organisational measures to prevent/limit release from site : Not applicable.

Conditions and measures related to municipal sewage treatment plant : Not applicable.

**Conditions and measures related to external treatment of waste for disposal** : Not applicable.

**Conditions and measures related to external recovery of waste** : Not applicable.

### Contributing scenario controlling worker exposure for 2: General measures applicable to all activities

#### General measures (aspiration)

The H304 risk phrase (May be fatal if swallowed and enters airways) relates to potential for aspiration, a non-quantifiable hazard determined by physico-chemical properties (i.e. viscosity) that can occur during ingestion and also if it is vomited following ingestion. A DNEL cannot be derived. Risks from the physicochemical hazards of substances can be controlled by implementing risk management measures. For substances classified as H304, the following measures need to be implemented to control the aspiration hazard.

Product safety-related measures: Do not ingest. If swallowed then seek immediate medical assistance. Do not induce vomiting.

**Product characteristics** : Liquid

**Concentration of substance in mixture or article** : Covers percentage substance in the product up to 100 %.

**Frequency and duration of use/exposure** : Covers daily exposures up to 8 hours (unless stated differently)

#### Conditions and measures related to personal protection, hygiene and health evaluation

**Advice on general occupational hygiene** : Assumes a good basic standard of occupational hygiene is implemented

## Section 3 - Exposure estimation and reference to its source

**Website:** : Not applicable.

### Exposure estimation and reference to its source - Environment: 1: General exposures

**Exposure assessment (environment):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

### Exposure estimation and reference to its source - Workers: 2: General measures applicable to all activities

**Exposure assessment (human):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

## Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

**Environment** : Not applicable.

**Health** : Available hazard data do not support the need for a DNEL to be established for other health effects.  
Risk management measures are based on qualitative risk characterisation.

## Additional good practice advice beyond the REACH CSA

**Environment** : Not available.

**Health** : Not available.

## Annex to the extended Safety Data Sheet (eSDS)

Professional

### Identification of the substance or mixture

Product definition : UVCB  
Code : 1168364  
Product name : PC FLUIDS EXXSOL D220/230 (EU)

### Section 1 - Title

Short title of the exposure scenario : Use in coatings - Professional  
List of use descriptors : **Identified use name:** Use in coatings - Professional  
**Process Category:** PROC01, PROC02, PROC03, PROC04, PROC05, PROC08a, PROC08b, PROC10, PROC11, PROC13, PROC15, PROC19  
**Sector of end use:** SU22  
**Subsequent service life relevant for that use:** No.  
**Environmental Release Category:** ERC08a, ERC08d  
Environmental contributing scenarios : **General exposures** - ERC08a, ERC08d  
Health Contributing scenarios : **General measures applicable to all activities** - PROC01, PROC02, PROC03, PROC04, PROC05, PROC08a, PROC08b, PROC10, PROC11, PROC13, PROC15, PROC19

<b>Processes and activities covered by the exposure scenario</b>	: Covers the use in coatings (paints, inks, adhesives, etc) including exposures during use (including materials receipt, storage, preparation and transfer from bulk and semi-bulk, application by spray, roller, brush, spreader by hand or similar methods, and film formation), and equipment cleaning, maintenance and associated laboratory activities.
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### Section 2 - Exposure controls

#### Contributing scenario controlling environmental exposure for 1: General exposures

<b>Product characteristics</b>	: Not applicable.
<b>Amounts used</b>	: Not applicable.
<b>Frequency and duration of use</b>	: Not applicable.
<b>Environment factors not influenced by risk management</b>	: Not applicable.
<b>Other operational conditions of use affecting environmental exposure</b>	: Not applicable.
<b>Technical conditions and measures at process level (source) to prevent release</b>	: Not applicable.
<b>Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil</b>	: Not applicable.
<b>Organisational measures to prevent/limit release from site</b>	: Not applicable.
<b>Conditions and measures related to municipal sewage treatment plant</b>	: Not applicable.

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**Conditions and measures related to external treatment of waste for disposal** : Not applicable.

**Conditions and measures related to external recovery of waste** : Not applicable.

### Contributing scenario controlling worker exposure for 2: General measures applicable to all activities

#### General measures (aspiration)

The H304 risk phrase (May be fatal if swallowed and enters airways) relates to potential for aspiration, a non-quantifiable hazard determined by physico-chemical properties (i.e. viscosity) that can occur during ingestion and also if it is vomited following ingestion. A DNEL cannot be derived. Risks from the physicochemical hazards of substances can be controlled by implementing risk management measures. For substances classified as H304, the following measures need to be implemented to control the aspiration hazard.

Product safety-related measures: Do not ingest. If swallowed then seek immediate medical assistance. Do not induce vomiting.

**Product characteristics** : Liquid

**Concentration of substance in mixture or article** : Covers percentage substance in the product up to 100 %.

**Frequency and duration of use/exposure** : Covers daily exposures up to 8 hours (unless stated differently)

#### Conditions and measures related to personal protection, hygiene and health evaluation

**Advice on general occupational hygiene** : Assumes a good basic standard of occupational hygiene is implemented

## Section 3 - Exposure estimation and reference to its source

**Website:** : Not applicable.

### Exposure estimation and reference to its source - Environment: 1: General exposures

**Exposure assessment (environment):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

### Exposure estimation and reference to its source - Workers: 2: General measures applicable to all activities

**Exposure assessment (human):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

## Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

**Environment** : Not applicable.

**Health** : Available hazard data do not support the need for a DNEL to be established for other health effects.  
Risk management measures are based on qualitative risk characterisation.

## Additional good practice advice beyond the REACH CSA

**Environment** : Not available.

**Health** : Not available.

## Annex to the extended Safety Data Sheet (eSDS)

Professional

### Identification of the substance or mixture

Product definition : UVCB  
Code : 1168364  
Product name : PC FLUIDS EXXSOL D220/230 (EU)

### Section 1 - Title

Short title of the exposure scenario : Use in cleaning agents - Professional  
List of use descriptors : **Identified use name:** Use in cleaning agents - Professional  
**Process Category:** PROC01, PROC02, PROC03, PROC04, PROC08a, PROC08b, PROC10, PROC11, PROC13, PROC19  
**Sector of end use:** SU22  
**Subsequent service life relevant for that use:** No.  
**Environmental Release Category:** ERC08a, ERC08d  
Environmental contributing scenarios : **General exposures** - ERC08a, ERC08d  
Health Contributing scenarios : **General measures applicable to all activities** - PROC01, PROC02, PROC03, PROC04, PROC08a, PROC08b, PROC10, PROC11, PROC13, PROC19

<b>Processes and activities covered by the exposure scenario</b>	: Covers the use as a component of cleaning products including pouring/unloading from drums or containers; and exposures during mixing/diluting in the preparatory phase and cleaning activities (including spraying, brushing, dipping, wiping automated and by hand).
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### Section 2 - Exposure controls

#### Contributing scenario controlling environmental exposure for 1: General exposures

<b>Product characteristics</b>	: Not applicable.
<b>Amounts used</b>	: Not applicable.
<b>Frequency and duration of use</b>	: Not applicable.
<b>Environment factors not influenced by risk management</b>	: Not applicable.
<b>Other operational conditions of use affecting environmental exposure</b>	: Not applicable.
<b>Technical conditions and measures at process level (source) to prevent release</b>	: Not applicable.
<b>Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil</b>	: Not applicable.
<b>Organisational measures to prevent/limit release from site</b>	: Not applicable.
<b>Conditions and measures related to municipal sewage treatment plant</b>	: Not applicable.

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**Conditions and measures related to external treatment of waste for disposal** : Not applicable.

**Conditions and measures related to external recovery of waste** : Not applicable.

### Contributing scenario controlling worker exposure for 2: General measures applicable to all activities

#### General measures (aspiration)

The H304 risk phrase (May be fatal if swallowed and enters airways) relates to potential for aspiration, a non-quantifiable hazard determined by physico-chemical properties (i.e. viscosity) that can occur during ingestion and also if it is vomited following ingestion. A DNEL cannot be derived. Risks from the physicochemical hazards of substances can be controlled by implementing risk management measures. For substances classified as H304, the following measures need to be implemented to control the aspiration hazard.

Product safety-related measures: Do not ingest. If swallowed then seek immediate medical assistance. Do not induce vomiting.

**Product characteristics** : Liquid

**Concentration of substance in mixture or article** : Covers percentage substance in the product up to 100 %.

**Frequency and duration of use/exposure** : Covers daily exposures up to 8 hours (unless stated differently)

#### Conditions and measures related to personal protection, hygiene and health evaluation

**Advice on general occupational hygiene** : Assumes a good basic standard of occupational hygiene is implemented

## Section 3 - Exposure estimation and reference to its source

**Website:** : Not applicable.

### Exposure estimation and reference to its source - Environment: 1: General exposures

**Exposure assessment (environment):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

### Exposure estimation and reference to its source - Workers: 2: General measures applicable to all activities

**Exposure assessment (human):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

## Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

**Environment** : Not applicable.

**Health** : Available hazard data do not support the need for a DNEL to be established for other health effects.  
Risk management measures are based on qualitative risk characterisation.

## Additional good practice advice beyond the REACH CSA

**Environment** : Not available.

**Health** : Not available.

## Annex to the extended Safety Data Sheet (eSDS)

Professional

### Identification of the substance or mixture

Product definition : UVCB  
Code : 1168364  
Product name : PC FLUIDS EXXSOL D220/230 (EU)

### Section 1 - Title

Short title of the exposure scenario : Lubricants - Professional (Low release)

List of use descriptors : **Identified use name:** Lubricants - Professional (Low release)  
**Process Category:** PROC01, PROC02, PROC03, PROC04, PROC08a, PROC08b, PROC09, PROC10, PROC11, PROC13, PROC17, PROC18, PROC20  
**Sector of end use:** SU22  
**Subsequent service life relevant for that use:** No.  
**Environmental Release Category:** ERC09a, ERC09b

Environmental contributing scenarios : **General exposures** - ERC09a, ERC09b

Health Contributing scenarios : **General measures applicable to all activities** - PROC01, PROC02, PROC03, PROC04, PROC08a, PROC08b, PROC09, PROC10, PROC11, PROC13, PROC17, PROC18, PROC20

<b>Processes and activities covered by the exposure scenario</b>	: Covers the use of formulated lubricants in closed and open systems including transfer operations, operation of engines and similar articles, reworking on reject articles, equipment maintenance and disposal of waste oil.
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### Section 2 - Exposure controls

#### Contributing scenario controlling environmental exposure for 1: General exposures

<b>Product characteristics</b>	: Not applicable.
<b>Amounts used</b>	: Not applicable.
<b>Frequency and duration of use</b>	: Not applicable.
<b>Environment factors not influenced by risk management</b>	: Not applicable.
<b>Other operational conditions of use affecting environmental exposure</b>	: Not applicable.
<b>Technical conditions and measures at process level (source) to prevent release</b>	: Not applicable.
<b>Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil</b>	: Not applicable.
<b>Organisational measures to prevent/limit release from site</b>	: Not applicable.
<b>Conditions and measures related to municipal sewage treatment plant</b>	: Not applicable.

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**Conditions and measures related to external treatment of waste for disposal** : Not applicable.

**Conditions and measures related to external recovery of waste** : Not applicable.

### Contributing scenario controlling worker exposure for 2: General measures applicable to all activities

#### General measures (aspiration)

The H304 risk phrase (May be fatal if swallowed and enters airways) relates to potential for aspiration, a non-quantifiable hazard determined by physico-chemical properties (i.e. viscosity) that can occur during ingestion and also if it is vomited following ingestion. A DNEL cannot be derived. Risks from the physicochemical hazards of substances can be controlled by implementing risk management measures. For substances classified as H304, the following measures need to be implemented to control the aspiration hazard.

Product safety-related measures: Do not ingest. If swallowed then seek immediate medical assistance. Do not induce vomiting.

**Product characteristics** : Liquid

**Concentration of substance in mixture or article** : Covers percentage substance in the product up to 100 %.

**Frequency and duration of use/exposure** : Covers daily exposures up to 8 hours (unless stated differently)

#### Conditions and measures related to personal protection, hygiene and health evaluation

**Advice on general occupational hygiene** : Assumes a good basic standard of occupational hygiene is implemented

## Section 3 - Exposure estimation and reference to its source

**Website:** : Not applicable.

### Exposure estimation and reference to its source - Environment: 1: General exposures

**Exposure assessment (environment):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

### Exposure estimation and reference to its source - Workers: 2: General measures applicable to all activities

**Exposure assessment (human):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

## Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

**Environment** : Not applicable.

**Health** : Available hazard data do not support the need for a DNEL to be established for other health effects.  
Risk management measures are based on qualitative risk characterisation.

## Additional good practice advice beyond the REACH CSA

**Environment** : Not available.

**Health** : Not available.

## Annex to the extended Safety Data Sheet (eSDS)

Professional

### Identification of the substance or mixture

Product definition : UVCB  
Code : 1168364  
Product name : PC FLUIDS EXXSOL D220/230 (EU)

### Section 1 - Title

Short title of the exposure scenario : Lubricants - Professional (high release)

List of use descriptors : **Identified use name:** Lubricants - Professional (high release)  
**Process Category:** PROC01, PROC02, PROC03, PROC04, PROC08a, PROC08b, PROC09, PROC10, PROC11, PROC13, PROC17, PROC18, PROC20  
**Sector of end use:** SU22  
**Subsequent service life relevant for that use:** No.  
**Environmental Release Category:** ERC08a, ERC08d

Environmental contributing scenarios : **General exposures** - ERC08a, ERC08d

Health Contributing scenarios : **General measures applicable to all activities** - PROC01, PROC02, PROC03, PROC04, PROC08a, PROC08b, PROC09, PROC10, PROC11, PROC13, PROC17, PROC18, PROC20

<b>Processes and activities covered by the exposure scenario</b>	: Covers the use of formulated lubricants in closed and open systems including transfer operations, operation of engines and similar articles, reworking on reject articles, equipment maintenance and disposal of waste oil.
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### Section 2 - Exposure controls

#### Contributing scenario controlling environmental exposure for 1: General exposures

<b>Product characteristics</b>	: Not applicable.
<b>Amounts used</b>	: Not applicable.
<b>Frequency and duration of use</b>	: Not applicable.
<b>Environment factors not influenced by risk management</b>	: Not applicable.
<b>Other operational conditions of use affecting environmental exposure</b>	: Not applicable.
<b>Technical conditions and measures at process level (source) to prevent release</b>	: Not applicable.
<b>Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil</b>	: Not applicable.
<b>Organisational measures to prevent/limit release from site</b>	: Not applicable.
<b>Conditions and measures related to municipal sewage treatment plant</b>	: Not applicable.

**Conditions and measures related to external treatment of waste for disposal** : Not applicable.

**Conditions and measures related to external recovery of waste** : Not applicable.

### Contributing scenario controlling worker exposure for 2: General measures applicable to all activities

#### General measures (aspiration)

The H304 risk phrase (May be fatal if swallowed and enters airways) relates to potential for aspiration, a non-quantifiable hazard determined by physico-chemical properties (i.e. viscosity) that can occur during ingestion and also if it is vomited following ingestion. A DNEL cannot be derived. Risks from the physicochemical hazards of substances can be controlled by implementing risk management measures. For substances classified as H304, the following measures need to be implemented to control the aspiration hazard.

Product safety-related measures: Do not ingest. If swallowed then seek immediate medical assistance. Do not induce vomiting.

**Product characteristics** : Liquid

**Concentration of substance in mixture or article** : Covers percentage substance in the product up to 100 %.

**Frequency and duration of use/exposure** : Covers daily exposures up to 8 hours (unless stated differently)

#### Conditions and measures related to personal protection, hygiene and health evaluation

**Advice on general occupational hygiene** : Assumes a good basic standard of occupational hygiene is implemented

## Section 3 - Exposure estimation and reference to its source

**Website:** : Not applicable.

### Exposure estimation and reference to its source - Environment: 1: General exposures

**Exposure assessment (environment):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

### Exposure estimation and reference to its source - Workers: 2: General measures applicable to all activities

**Exposure assessment (human):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

## Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

**Environment** : Not applicable.

**Health** : Available hazard data do not support the need for a DNEL to be established for other health effects.  
Risk management measures are based on qualitative risk characterisation.

## Additional good practice advice beyond the REACH CSA

**Environment** : Not available.

**Health** : Not available.

## Annex to the extended Safety Data Sheet (eSDS)

Professional

### Identification of the substance or mixture

Product definition : UVCB  
Code : 1168364  
Product name : PC FLUIDS EXXSOL D220/230 (EU)

### Section 1 - Title

Short title of the exposure scenario : Use in metal working fluids/rolling oils - Professional  
List of use descriptors : **Identified use name:** Use in metal working fluids/rolling oils - Professional  
**Process Category:** PROC01, PROC02, PROC03, PROC05, PROC08a, PROC08b, PROC09, PROC10, PROC11, PROC13, PROC17  
**Sector of end use:** SU22  
**Subsequent service life relevant for that use:** No.  
**Environmental Release Category:** ERC08a, ERC08d  
Environmental contributing scenarios : **General exposures** - ERC08a, ERC08d  
Health Contributing scenarios : **General measures applicable to all activities** - PROC01, PROC02, PROC03, PROC05, PROC08a, PROC08b, PROC09, PROC10, PROC11, PROC13, PROC17

<b>Processes and activities covered by the exposure scenario</b>	: Covers the use in formulated MWFs including transfer operations, open and contained cutting/machining activities, automated and manual application of corrosion protections, draining and working on contaminated/reject articles, and disposal of waste oils.
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### Section 2 - Exposure controls

#### Contributing scenario controlling environmental exposure for 1: General exposures

<b>Product characteristics</b>	: Not applicable.
<b>Amounts used</b>	: Not applicable.
<b>Frequency and duration of use</b>	: Not applicable.
<b>Environment factors not influenced by risk management</b>	: Not applicable.
<b>Other operational conditions of use affecting environmental exposure</b>	: Not applicable.
<b>Technical conditions and measures at process level (source) to prevent release</b>	: Not applicable.
<b>Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil</b>	: Not applicable.
<b>Organisational measures to prevent/limit release from site</b>	: Not applicable.
<b>Conditions and measures related to municipal sewage treatment plant</b>	: Not applicable.

**Conditions and measures related to external treatment of waste for disposal** : Not applicable.

**Conditions and measures related to external recovery of waste** : Not applicable.

### Contributing scenario controlling worker exposure for 2: General measures applicable to all activities

#### General measures (aspiration)

The H304 risk phrase (May be fatal if swallowed and enters airways) relates to potential for aspiration, a non-quantifiable hazard determined by physico-chemical properties (i.e. viscosity) that can occur during ingestion and also if it is vomited following ingestion. A DNEL cannot be derived. Risks from the physicochemical hazards of substances can be controlled by implementing risk management measures. For substances classified as H304, the following measures need to be implemented to control the aspiration hazard.

Product safety-related measures: Do not ingest. If swallowed then seek immediate medical assistance. Do not induce vomiting.

**Product characteristics** : Liquid

**Concentration of substance in mixture or article** : Covers percentage substance in the product up to 100 %.

**Frequency and duration of use/exposure** : Covers daily exposures up to 8 hours (unless stated differently)

#### Conditions and measures related to personal protection, hygiene and health evaluation

**Advice on general occupational hygiene** : Assumes a good basic standard of occupational hygiene is implemented

## Section 3 - Exposure estimation and reference to its source

**Website:** : Not applicable.

### Exposure estimation and reference to its source - Environment: 1: General exposures

**Exposure assessment (environment):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

### Exposure estimation and reference to its source - Workers: 2: General measures applicable to all activities

**Exposure assessment (human):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

## Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

**Environment** : Not applicable.

**Health** : Available hazard data do not support the need for a DNEL to be established for other health effects.  
Risk management measures are based on qualitative risk characterisation.

## Additional good practice advice beyond the REACH CSA

**Environment** : Not available.

**Health** : Not available.

## Annex to the extended Safety Data Sheet (eSDS)

Professional

### Identification of the substance or mixture

Product definition : UVCB  
Code : 1168364  
Product name : PC FLUIDS EXXSOL D220/230 (EU)

### Section 1 - Title

Short title of the exposure scenario : Use as binders and release agents - Professional

List of use descriptors : **Identified use name:** Use as binders and release agents - Professional  
**Process Category:** PROC01, PROC02, PROC03, PROC04, PROC06, PROC08a, PROC08b, PROC10, PROC11, PROC14  
**Sector of end use:** SU22  
**Subsequent service life relevant for that use:** No.  
**Environmental Release Category:** ERC08a, ERC08d

Environmental contributing scenarios : **General exposures** - ERC08a, ERC08d

Health Contributing scenarios : **General measures applicable to all activities** - PROC01, PROC02, PROC03, PROC04, PROC06, PROC08a, PROC08b, PROC10, PROC11, PROC14

Processes and activities covered by the exposure scenario	: Covers the use as binders and release agents including material transfers, mixing, application by spraying, brushing, and handling of waste.
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### Section 2 - Exposure controls

<b>Contributing scenario controlling environmental exposure for 1: General exposures</b>	
Product characteristics	: Not applicable.
Amounts used	: Not applicable.
Frequency and duration of use	: Not applicable.
Environment factors not influenced by risk management	: Not applicable.
Other operational conditions of use affecting environmental exposure	: Not applicable.
Technical conditions and measures at process level (source) to prevent release	: Not applicable.
Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil	: Not applicable.
Organisational measures to prevent/limit release from site	: Not applicable.
Conditions and measures related to municipal sewage treatment plant	: Not applicable.

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**Conditions and measures related to external treatment of waste for disposal** : Not applicable.

**Conditions and measures related to external recovery of waste** : Not applicable.

### Contributing scenario controlling worker exposure for 2: General measures applicable to all activities

#### General measures (aspiration)

The H304 risk phrase (May be fatal if swallowed and enters airways) relates to potential for aspiration, a non-quantifiable hazard determined by physico-chemical properties (i.e. viscosity) that can occur during ingestion and also if it is vomited following ingestion. A DNEL cannot be derived. Risks from the physicochemical hazards of substances can be controlled by implementing risk management measures. For substances classified as H304, the following measures need to be implemented to control the aspiration hazard.

Product safety-related measures: Do not ingest. If swallowed then seek immediate medical assistance. Do not induce vomiting.

**Product characteristics** : Liquid

**Concentration of substance in mixture or article** : Covers percentage substance in the product up to 100 %.

**Frequency and duration of use/exposure** : Covers daily exposures up to 8 hours (unless stated differently)

#### Conditions and measures related to personal protection, hygiene and health evaluation

**Advice on general occupational hygiene** : Assumes a good basic standard of occupational hygiene is implemented

## Section 3 - Exposure estimation and reference to its source

**Website:** : Not applicable.

### Exposure estimation and reference to its source - Environment: 1: General exposures

**Exposure assessment (environment):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

### Exposure estimation and reference to its source - Workers: 2: General measures applicable to all activities

**Exposure assessment (human):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

## Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

**Environment** : Not applicable.

**Health** : Available hazard data do not support the need for a DNEL to be established for other health effects.  
Risk management measures are based on qualitative risk characterisation.

## Additional good practice advice beyond the REACH CSA

**Environment** : Not available.

**Health** : Not available.

## Annex to the extended Safety Data Sheet (eSDS)

Professional

### Identification of the substance or mixture

Product definition : UVCB  
Code : 1168364  
Product name : PC FLUIDS EXXSOL D220/230 (EU)

### Section 1 - Title

Short title of the exposure scenario : Use as a fuel - Professional  
List of use descriptors : **Identified use name:** Use as a fuel - Professional  
**Process Category:** PROC01, PROC02, PROC03, PROC08a, PROC08b, PROC16  
**Sector of end use:** SU22  
**Subsequent service life relevant for that use:** No.  
**Environmental Release Category:** ERC09a, ERC09b  
Environmental contributing scenarios : **General exposures** - ERC09a, ERC09b  
Health Contributing scenarios : **General measures applicable to all activities** - PROC01, PROC02, PROC03, PROC08a, PROC08b, PROC16

<b>Processes and activities covered by the exposure scenario</b>	: Covers the use as a fuel (or fuel additive) and includes activities associated with its transfer, use, equipment maintenance and handling of waste.
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### Section 2 - Exposure controls

#### Contributing scenario controlling environmental exposure for 1: General exposures

<b>Product characteristics</b>	: Not applicable.
<b>Amounts used</b>	: Not applicable.
<b>Frequency and duration of use</b>	: Not applicable.
<b>Environment factors not influenced by risk management</b>	: Not applicable.
<b>Other operational conditions of use affecting environmental exposure</b>	: Not applicable.
<b>Technical conditions and measures at process level (source) to prevent release</b>	: Not applicable.
<b>Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil</b>	: Not applicable.
<b>Organisational measures to prevent/limit release from site</b>	: Not applicable.
<b>Conditions and measures related to municipal sewage treatment plant</b>	: Not applicable.
<b>Conditions and measures related to external treatment of waste for disposal</b>	: Not applicable.

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**Conditions and measures related to external recovery of waste** : Not applicable.

### Contributing scenario controlling worker exposure for 2: General measures applicable to all activities

#### General measures (aspiration)

The H304 risk phrase (May be fatal if swallowed and enters airways) relates to potential for aspiration, a non-quantifiable hazard determined by physico-chemical properties (i.e. viscosity) that can occur during ingestion and also if it is vomited following ingestion. A DNEL cannot be derived. Risks from the physicochemical hazards of substances can be controlled by implementing risk management measures. For substances classified as H304, the following measures need to be implemented to control the aspiration hazard.

Product safety-related measures: Do not ingest. If swallowed then seek immediate medical assistance. Do not induce vomiting.

**Product characteristics** : Liquid

**Concentration of substance in mixture or article** : Covers percentage substance in the product up to 100 %.

**Frequency and duration of use/exposure** : Covers daily exposures up to 8 hours (unless stated differently)

#### Conditions and measures related to personal protection, hygiene and health evaluation

**Advice on general occupational hygiene** : Assumes a good basic standard of occupational hygiene is implemented

## Section 3 - Exposure estimation and reference to its source

**Website:** : Not applicable.

### Exposure estimation and reference to its source - Environment: 1: General exposures

**Exposure assessment (environment):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

### Exposure estimation and reference to its source - Workers: 2: General measures applicable to all activities

**Exposure assessment (human):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

## Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

**Environment** : Not applicable.

**Health** : Available hazard data do not support the need for a DNEL to be established for other health effects.  
Risk management measures are based on qualitative risk characterisation.

## Additional good practice advice beyond the REACH CSA

**Environment** : Not available.

**Health** : Not available.

## Annex to the extended Safety Data Sheet (eSDS)

Professional

### Identification of the substance or mixture

Product definition : UVCB  
Code : 1168364  
Product name : PC FLUIDS EXXSOL D220/230 (EU)

### Section 1 - Title

Short title of the exposure scenario : Functional fluids - Professional  
List of use descriptors : **Identified use name:** Functional fluids - Professional  
**Process Category:** PROC01, PROC02, PROC03, PROC08a, PROC09, PROC20  
**Sector of end use:** SU22  
**Subsequent service life relevant for that use:** No.  
**Environmental Release Category:** ERC09a, ERC09b  
Environmental contributing scenarios : **General exposures** - ERC09a, ERC09b  
Health Contributing scenarios : **General measures applicable to all activities** - PROC01, PROC02, PROC03, PROC08a, PROC09, PROC20

<b>Processes and activities covered by the exposure scenario</b>	: Use as functional fluids e.g. cable oils, transfer oils, insulators, refrigerants, hydraulic fluids in closed professional equipment including incidental exposures during maintenance and related material transfers.
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### Section 2 - Exposure controls

#### Contributing scenario controlling environmental exposure for 1: General exposures

<b>Product characteristics</b>	: Not applicable.
<b>Amounts used</b>	: Not applicable.
<b>Frequency and duration of use</b>	: Not applicable.
<b>Environment factors not influenced by risk management</b>	: Not applicable.
<b>Other operational conditions of use affecting environmental exposure</b>	: Not applicable.
<b>Technical conditions and measures at process level (source) to prevent release</b>	: Not applicable.
<b>Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil</b>	: Not applicable.
<b>Organisational measures to prevent/limit release from site</b>	: Not applicable.
<b>Conditions and measures related to municipal sewage treatment plant</b>	: Not applicable.
<b>Conditions and measures related to external treatment of waste for disposal</b>	: Not applicable.

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**Conditions and measures related to external recovery of waste** : Not applicable.

### Contributing scenario controlling worker exposure for 2: General measures applicable to all activities

#### General measures (aspiration)

The H304 risk phrase (May be fatal if swallowed and enters airways) relates to potential for aspiration, a non-quantifiable hazard determined by physico-chemical properties (i.e. viscosity) that can occur during ingestion and also if it is vomited following ingestion. A DNEL cannot be derived. Risks from the physicochemical hazards of substances can be controlled by implementing risk management measures. For substances classified as H304, the following measures need to be implemented to control the aspiration hazard.

Product safety-related measures: Do not ingest. If swallowed then seek immediate medical assistance. Do not induce vomiting.

**Product characteristics** : Liquid

**Concentration of substance in mixture or article** : Covers percentage substance in the product up to 100 %.

**Frequency and duration of use/exposure** : Covers daily exposures up to 8 hours (unless stated differently)

#### Conditions and measures related to personal protection, hygiene and health evaluation

**Advice on general occupational hygiene** : Assumes a good basic standard of occupational hygiene is implemented

## Section 3 - Exposure estimation and reference to its source

**Website:** : Not applicable.

### Exposure estimation and reference to its source - Environment: 1: General exposures

**Exposure assessment (environment):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

### Exposure estimation and reference to its source - Workers: 2: General measures applicable to all activities

**Exposure assessment (human):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

## Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

**Environment** : Not applicable.

**Health** : Available hazard data do not support the need for a DNEL to be established for other health effects.  
Risk management measures are based on qualitative risk characterisation.

## Additional good practice advice beyond the REACH CSA

**Environment** : Not available.

**Health** : Not available.

## Annex to the extended Safety Data Sheet (eSDS)

Professional

### Identification of the substance or mixture

Product definition : UVCB  
Code : 1168364  
Product name : PC FLUIDS EXXSOL D220/230 (EU)

### Section 1 - Title

Short title of the exposure scenario : De-icing and anti-icing applications - Professional  
List of use descriptors : **Identified use name:** De-icing and anti-icing applications - Professional  
**Process Category:** PROC01, PROC02, PROC08a, PROC08b, PROC11  
**Sector of end use:** SU22  
**Subsequent service life relevant for that use:** No.  
Environmental contributing scenarios : **General exposures**  
Health Contributing scenarios : **General measures applicable to all activities** - PROC01, PROC02, PROC08a, PROC08b, PROC11

Processes and activities covered by the exposure scenario : Ice prevention and de-icing of vehicles, aircraft and other equipment by spraying

### Section 2 - Exposure controls

#### Contributing scenario controlling environmental exposure for 1: General exposures

Product characteristics : Not applicable.  
Amounts used : Not applicable.  
Frequency and duration of use : Not applicable.  
Environment factors not influenced by risk management : Not applicable.  
Other operational conditions of use affecting environmental exposure : Not applicable.  
Technical conditions and measures at process level (source) to prevent release : Not applicable.  
Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil : Not applicable.  
Organisational measures to prevent/limit release from site : Not applicable.  
Conditions and measures related to municipal sewage treatment plant : Not applicable.  
Conditions and measures related to external treatment of waste for disposal : Not applicable.

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**Conditions and measures related to external recovery of waste** : Not applicable.

### Contributing scenario controlling worker exposure for 2: General measures applicable to all activities

#### General measures (aspiration)

The H304 risk phrase (May be fatal if swallowed and enters airways) relates to potential for aspiration, a non-quantifiable hazard determined by physico-chemical properties (i.e. viscosity) that can occur during ingestion and also if it is vomited following ingestion. A DNEL cannot be derived. Risks from the physicochemical hazards of substances can be controlled by implementing risk management measures. For substances classified as H304, the following measures need to be implemented to control the aspiration hazard.

Product safety-related measures: Do not ingest. If swallowed then seek immediate medical assistance. Do not induce vomiting.

**Product characteristics** : Liquid

**Concentration of substance in mixture or article** : Covers percentage substance in the product up to 100 %.

**Frequency and duration of use/exposure** : Covers daily exposures up to 8 hours (unless stated differently)

#### Conditions and measures related to personal protection, hygiene and health evaluation

**Advice on general occupational hygiene** : Assumes a good basic standard of occupational hygiene is implemented

## Section 3 - Exposure estimation and reference to its source

**Website:** : Not applicable.

### Exposure estimation and reference to its source - Environment: 1: General exposures

**Exposure assessment (environment):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

### Exposure estimation and reference to its source - Workers: 2: General measures applicable to all activities

**Exposure assessment (human):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

## Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

**Environment** : Not applicable.

**Health** : Available hazard data do not support the need for a DNEL to be established for other health effects.  
Risk management measures are based on qualitative risk characterisation.

## Additional good practice advice beyond the REACH CSA

**Environment** : Not available.

**Health** : Not available.

## Annex to the extended Safety Data Sheet (eSDS)

Professional

### Identification of the substance or mixture

Product definition : UVCB  
Code : 1168364  
Product name : PC FLUIDS EXXSOL D220/230 (EU)

### Section 1 - Title

Short title of the exposure scenario : Road and construction applications

List of use descriptors : **Identified use name:** Road and construction applications  
**Process Category:** PROC01, PROC02, PROC08a, PROC08b, PROC09, PROC10, PROC11, PROC13  
**Sector of end use:** SU22  
**Subsequent service life relevant for that use:** No.  
**Environmental Release Category:** ERC08d, ERC08f

Environmental contributing scenarios : **General exposures -** ERC08d, ERC08f

Health Contributing scenarios : **General measures applicable to all activities -** PROC01, PROC02, PROC08a, PROC08b, PROC09, PROC10, PROC11, PROC13

Processes and activities covered by the exposure scenario	: Bulk loading (including marine vessel/barge, rail/road car and IBC loading)
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### Section 2 - Exposure controls

#### Contributing scenario controlling environmental exposure for 1: General exposures

Product characteristics : Not applicable.

Amounts used : Not applicable.

Frequency and duration of use : Not applicable.

Environment factors not influenced by risk management : Not applicable.

Other operational conditions of use affecting environmental exposure : Not applicable.

Technical conditions and measures at process level (source) to prevent release : Not applicable.

Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil : Not applicable.

Organisational measures to prevent/limit release from site : Not applicable.

Conditions and measures related to municipal sewage treatment plant : Not applicable.

**Conditions and measures related to external treatment of waste for disposal** : Not applicable.

**Conditions and measures related to external recovery of waste** : Not applicable.

### Contributing scenario controlling worker exposure for 2: General measures applicable to all activities

#### General measures (aspiration)

The H304 risk phrase (May be fatal if swallowed and enters airways) relates to potential for aspiration, a non-quantifiable hazard determined by physico-chemical properties (i.e. viscosity) that can occur during ingestion and also if it is vomited following ingestion. A DNEL cannot be derived. Risks from the physicochemical hazards of substances can be controlled by implementing risk management measures. For substances classified as H304, the following measures need to be implemented to control the aspiration hazard.

Product safety-related measures: Do not ingest. If swallowed then seek immediate medical assistance. Do not induce vomiting.

**Product characteristics** : Liquid

**Concentration of substance in mixture or article** : Covers percentage substance in the product up to 100 %.

**Frequency and duration of use/exposure** : Covers daily exposures up to 8 hours (unless stated differently)

#### Conditions and measures related to personal protection, hygiene and health evaluation

**Advice on general occupational hygiene** : Assumes a good basic standard of occupational hygiene is implemented

## Section 3 - Exposure estimation and reference to its source

**Website:** : Not applicable.

### Exposure estimation and reference to its source - Environment: 1: General exposures

**Exposure assessment (environment):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

### Exposure estimation and reference to its source - Workers: 2: General measures applicable to all activities

**Exposure assessment (human):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

## Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

**Environment** : Not applicable.

**Health** : Available hazard data do not support the need for a DNEL to be established for other health effects.  
Risk management measures are based on qualitative risk characterisation.

## Additional good practice advice beyond the REACH CSA

**Environment** : Not available.

**Health** : Not available.

## Annex to the extended Safety Data Sheet (eSDS)

Professional

### Identification of the substance or mixture

Product definition : UVCB  
Code : 1168364  
Product name : PC FLUIDS EXXSOL D220/230 (EU)

### Section 1 - Title

Short title of the exposure scenario : Use in laboratories - Professional  
List of use descriptors : **Identified use name:** Use in laboratories - Professional  
**Process Category:** PROC15  
**Sector of end use:** SU22  
**Subsequent service life relevant for that use:** No.  
Environmental contributing scenarios : **General exposures**  
Health Contributing scenarios : **General measures applicable to all activities - PROC15**

Processes and activities covered by the exposure scenario	: Use of small quantities within laboratory settings, including material transfers and equipment cleaning
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### Section 2 - Exposure controls

#### Contributing scenario controlling environmental exposure for 1: General exposures

Product characteristics : Not applicable.  
Amounts used : Not applicable.  
Frequency and duration of use : Not applicable.  
Environment factors not influenced by risk management : Not applicable.  
Other operational conditions of use affecting environmental exposure : Not applicable.  
Technical conditions and measures at process level (source) to prevent release : Not applicable.  
Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil : Not applicable.  
Organisational measures to prevent/limit release from site : Not applicable.  
Conditions and measures related to municipal sewage treatment plant : Not applicable.  
Conditions and measures related to external treatment of waste for disposal : Not applicable.

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**Conditions and measures related to external recovery of waste** : Not applicable.

### Contributing scenario controlling worker exposure for 2: General measures applicable to all activities

#### General measures (aspiration)

The H304 risk phrase (May be fatal if swallowed and enters airways) relates to potential for aspiration, a non-quantifiable hazard determined by physico-chemical properties (i.e. viscosity) that can occur during ingestion and also if it is vomited following ingestion. A DNEL cannot be derived. Risks from the physicochemical hazards of substances can be controlled by implementing risk management measures. For substances classified as H304, the following measures need to be implemented to control the aspiration hazard.

Product safety-related measures: Do not ingest. If swallowed then seek immediate medical assistance. Do not induce vomiting.

**Product characteristics** : Liquid

**Concentration of substance in mixture or article** : Covers percentage substance in the product up to 100 %.

**Frequency and duration of use/exposure** : Covers daily exposures up to 8 hours (unless stated differently)

#### Conditions and measures related to personal protection, hygiene and health evaluation

**Advice on general occupational hygiene** : Assumes a good basic standard of occupational hygiene is implemented

## Section 3 - Exposure estimation and reference to its source

**Website:** : Not applicable.

### Exposure estimation and reference to its source - Environment: 1: General exposures

**Exposure assessment (environment):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

### Exposure estimation and reference to its source - Workers: 2: General measures applicable to all activities

**Exposure assessment (human):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

## Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

**Environment** : Not applicable.

**Health** : Available hazard data do not support the need for a DNEL to be established for other health effects.  
Risk management measures are based on qualitative risk characterisation.

## Additional good practice advice beyond the REACH CSA

**Environment** : Not available.

**Health** : Not available.

## Annex to the extended Safety Data Sheet (eSDS)

Professional

### Identification of the substance or mixture

Product definition : UVCB  
Code : 1168364  
Product name : PC FLUIDS EXXSOL D220/230 (EU)

### Section 1 - Title

Short title of the exposure scenario : Manufacture and use of slurry explosives  
List of use descriptors : **Identified use name:** Manufacture and use of slurry explosives  
**Process Category:** PROC01, PROC03, PROC05, PROC08a, PROC08b  
**Sector of end use:** SU22  
**Subsequent service life relevant for that use:** No.  
**Environmental Release Category:** ERC08e  
Environmental contributing scenarios : **General exposures - ERC08e**  
Health Contributing scenarios : **General measures applicable to all activities - PROC01, PROC03, PROC05, PROC08a, PROC08b**

<b>Processes and activities covered by the exposure scenario</b>	: Covers exposures arising from the manufacture and use of slurry explosives (including materials transfer, mixing and charging) and equipment cleaning.
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### Section 2 - Exposure controls

#### Contributing scenario controlling environmental exposure for 1: General exposures

<b>Product characteristics</b>	: Not applicable.
<b>Amounts used</b>	: Not applicable.
<b>Frequency and duration of use</b>	: Not applicable.
<b>Environment factors not influenced by risk management</b>	: Not applicable.
<b>Other operational conditions of use affecting environmental exposure</b>	: Not applicable.
<b>Technical conditions and measures at process level (source) to prevent release</b>	: Not applicable.
<b>Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil</b>	: Not applicable.
<b>Organisational measures to prevent/limit release from site</b>	: Not applicable.
<b>Conditions and measures related to municipal sewage treatment plant</b>	: Not applicable.
<b>Conditions and measures related to external treatment of waste for disposal</b>	: Not applicable.

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**Conditions and measures related to external recovery of waste** : Not applicable.

### Contributing scenario controlling worker exposure for 2: General measures applicable to all activities

#### General measures (aspiration)

The H304 risk phrase (May be fatal if swallowed and enters airways) relates to potential for aspiration, a non-quantifiable hazard determined by physico-chemical properties (i.e. viscosity) that can occur during ingestion and also if it is vomited following ingestion. A DNEL cannot be derived. Risks from the physicochemical hazards of substances can be controlled by implementing risk management measures. For substances classified as H304, the following measures need to be implemented to control the aspiration hazard.

Product safety-related measures: Do not ingest. If swallowed then seek immediate medical assistance. Do not induce vomiting.

**Product characteristics** : Liquid

**Concentration of substance in mixture or article** : Covers percentage substance in the product up to 100 %.

**Frequency and duration of use/exposure** : Covers daily exposures up to 8 hours (unless stated differently)

#### Conditions and measures related to personal protection, hygiene and health evaluation

**Advice on general occupational hygiene** : Assumes a good basic standard of occupational hygiene is implemented

## Section 3 - Exposure estimation and reference to its source

**Website:** : Not applicable.

### Exposure estimation and reference to its source - Environment: 1: General exposures

**Exposure assessment (environment):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

### Exposure estimation and reference to its source - Workers: 2: General measures applicable to all activities

**Exposure assessment (human):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

## Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

**Environment** : Not applicable.

**Health** : Available hazard data do not support the need for a DNEL to be established for other health effects.  
Risk management measures are based on qualitative risk characterisation.

## Additional good practice advice beyond the REACH CSA

**Environment** : Not available.

**Health** : Not available.

## Annex to the extended Safety Data Sheet (eSDS)

Professional

### Identification of the substance or mixture

Product definition : UVCB  
Code : 1168364  
Product name : PC FLUIDS EXXSOL D220/230 (EU)

### Section 1 - Title

Short title of the exposure scenario : Polymer processing - Professional  
List of use descriptors : **Identified use name:** Polymer processing - Professional  
**Process Category:** PROC01, PROC02, PROC06, PROC08a, PROC08b, PROC14, PROC21  
**Sector of end use:** SU22  
**Subsequent service life relevant for that use:** No.  
**Environmental Release Category:** ERC08a, ERC08d  
Environmental contributing scenarios : **General exposures** - ERC08a, ERC08d  
Health Contributing scenarios : **General measures applicable to all activities** - PROC01, PROC02, PROC06, PROC08a, PROC08b, PROC14, PROC21

<b>Processes and activities covered by the exposure scenario</b>	: Processing of formulated polymers including material transfers, moulding and forming activities, material re-works and associated maintenance.
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### Section 2 - Exposure controls

#### Contributing scenario controlling environmental exposure for 1: General exposures

<b>Product characteristics</b>	: Not applicable.
<b>Amounts used</b>	: Not applicable.
<b>Frequency and duration of use</b>	: Not applicable.
<b>Environment factors not influenced by risk management</b>	: Not applicable.
<b>Other operational conditions of use affecting environmental exposure</b>	: Not applicable.
<b>Technical conditions and measures at process level (source) to prevent release</b>	: Not applicable.
<b>Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil</b>	: Not applicable.
<b>Organisational measures to prevent/limit release from site</b>	: Not applicable.
<b>Conditions and measures related to municipal sewage treatment plant</b>	: Not applicable.

**Conditions and measures related to external treatment of waste for disposal** : Not applicable.

**Conditions and measures related to external recovery of waste** : Not applicable.

### Contributing scenario controlling worker exposure for 2: General measures applicable to all activities

#### General measures (aspiration)

The H304 risk phrase (May be fatal if swallowed and enters airways) relates to potential for aspiration, a non-quantifiable hazard determined by physico-chemical properties (i.e. viscosity) that can occur during ingestion and also if it is vomited following ingestion. A DNEL cannot be derived. Risks from the physicochemical hazards of substances can be controlled by implementing risk management measures. For substances classified as H304, the following measures need to be implemented to control the aspiration hazard.

Product safety-related measures: Do not ingest. If swallowed then seek immediate medical assistance. Do not induce vomiting.

**Product characteristics** : Liquid

**Concentration of substance in mixture or article** : Covers percentage substance in the product up to 100 %.

**Frequency and duration of use/exposure** : Covers daily exposures up to 8 hours (unless stated differently)

#### Conditions and measures related to personal protection, hygiene and health evaluation

**Advice on general occupational hygiene** : Assumes a good basic standard of occupational hygiene is implemented

## Section 3 - Exposure estimation and reference to its source

**Website:** : Not applicable.

### Exposure estimation and reference to its source - Environment: 1: General exposures

**Exposure assessment (environment):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

### Exposure estimation and reference to its source - Workers: 2: General measures applicable to all activities

**Exposure assessment (human):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

## Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

**Environment** : Not applicable.

**Health** : Available hazard data do not support the need for a DNEL to be established for other health effects.  
Risk management measures are based on qualitative risk characterisation.

## Additional good practice advice beyond the REACH CSA

**Environment** : Not available.

**Health** : Not available.

## Annex to the extended Safety Data Sheet (eSDS)

Professional

### Identification of the substance or mixture

Product definition : UVCB  
Code : 1168364  
Product name : PC FLUIDS EXXSOL D220/230 (EU)

### Section 1 - Title

Short title of the exposure scenario : Water treatment chemicals - Professional  
List of use descriptors : **Identified use name:** Water treatment chemicals - Professional  
**Process Category:** PROC01, PROC02, PROC03, PROC04, PROC08a, PROC08b, PROC13  
**Sector of end use:** SU22  
**Subsequent service life relevant for that use:** No.  
**Environmental Release Category:** ERC08f  
Environmental contributing scenarios : **General exposures - ERC08f**  
Health Contributing scenarios : **General measures applicable to all activities - PROC01, PROC02, PROC03, PROC04, PROC08a, PROC08b, PROC13**

<b>Processes and activities covered by the exposure scenario</b>	: Covers the use of the substance for the treatment of water in open and closed systems.
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### Section 2 - Exposure controls

#### Contributing scenario controlling environmental exposure for 1: General exposures

<b>Product characteristics</b>	: Not applicable.
<b>Amounts used</b>	: Not applicable.
<b>Frequency and duration of use</b>	: Not applicable.
<b>Environment factors not influenced by risk management</b>	: Not applicable.
<b>Other operational conditions of use affecting environmental exposure</b>	: Not applicable.
<b>Technical conditions and measures at process level (source) to prevent release</b>	: Not applicable.
<b>Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil</b>	: Not applicable.
<b>Organisational measures to prevent/limit release from site</b>	: Not applicable.
<b>Conditions and measures related to municipal sewage treatment plant</b>	: Not applicable.

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**Conditions and measures related to external treatment of waste for disposal** : Not applicable.

**Conditions and measures related to external recovery of waste** : Not applicable.

### Contributing scenario controlling worker exposure for 2: General measures applicable to all activities

#### General measures (aspiration)

The H304 risk phrase (May be fatal if swallowed and enters airways) relates to potential for aspiration, a non-quantifiable hazard determined by physico-chemical properties (i.e. viscosity) that can occur during ingestion and also if it is vomited following ingestion. A DNEL cannot be derived. Risks from the physicochemical hazards of substances can be controlled by implementing risk management measures. For substances classified as H304, the following measures need to be implemented to control the aspiration hazard.

Product safety-related measures: Do not ingest. If swallowed then seek immediate medical assistance. Do not induce vomiting.

**Product characteristics** : Liquid

**Concentration of substance in mixture or article** : Covers percentage substance in the product up to 100 %.

**Frequency and duration of use/exposure** : Covers daily exposures up to 8 hours (unless stated differently)

#### Conditions and measures related to personal protection, hygiene and health evaluation

**Advice on general occupational hygiene** : Assumes a good basic standard of occupational hygiene is implemented

## Section 3 - Exposure estimation and reference to its source

**Website:** : Not applicable.

### Exposure estimation and reference to its source - Environment: 1: General exposures

**Exposure assessment (environment):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

### Exposure estimation and reference to its source - Workers: 2: General measures applicable to all activities

**Exposure assessment (human):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

## Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

**Environment** : Not applicable.

**Health** : Available hazard data do not support the need for a DNEL to be established for other health effects.  
Risk management measures are based on qualitative risk characterisation.

## Additional good practice advice beyond the REACH CSA

**Environment** : Not available.

**Health** : Not available.

## Annex to the extended Safety Data Sheet (eSDS)

Industrial

### Identification of the substance or mixture

Product definition : UVCB  
Code : 1168364  
Product name : PC FLUIDS EXXSOL D220/230 (EU)

### Section 1 - Title

Short title of the exposure scenario : Use in rubber production and processing

List of use descriptors : **Identified use name:** Use in rubber production and processing  
**Process Category:** PROC01, PROC02, PROC03, PROC04, PROC05, PROC06, PROC07, PROC08a, PROC08b, PROC09, PROC13, PROC14, PROC15, PROC21  
**Sector of end use:** SU03, SU08, SU09, SU10  
**Subsequent service life relevant for that use:** No.  
**Environmental Release Category:** ERC01, ERC04, ERC06d

Environmental contributing scenarios : **General exposures -** ERC01, ERC04, ERC06d

Health Contributing scenarios : **General measures applicable to all activities -** PROC01, PROC02, PROC03, PROC04, PROC05, PROC06, PROC07, PROC08a, PROC08b, PROC09, PROC13, PROC14, PROC15, PROC21

Processes and activities covered by the exposure scenario	: Manufacture of tyres and general rubber articles, including processing of raw (uncured) rubber, handling and mixing of rubber additives, vulcanising, cooling and finishing.
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### Section 2 - Exposure controls

<b>Contributing scenario controlling environmental exposure for 1: General exposures</b>	
Product characteristics	: Not applicable.
Amounts used	: Not applicable.
Frequency and duration of use	: Not applicable.
Environment factors not influenced by risk management	: Not applicable.
Other operational conditions of use affecting environmental exposure	: Not applicable.
Technical conditions and measures at process level (source) to prevent release	: Not applicable.
Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil	: Not applicable.
Organisational measures to prevent/limit release from site	: Not applicable.
Conditions and measures related to municipal sewage treatment plant	: Not applicable.

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**Conditions and measures related to external treatment of waste for disposal** : Not applicable.

**Conditions and measures related to external recovery of waste** : Not applicable.

### Contributing scenario controlling worker exposure for 2: General measures applicable to all activities

#### General measures (aspiration)

The H304 risk phrase (May be fatal if swallowed and enters airways) relates to potential for aspiration, a non-quantifiable hazard determined by physico-chemical properties (i.e. viscosity) that can occur during ingestion and also if it is vomited following ingestion. A DNEL cannot be derived. Risks from the physicochemical hazards of substances can be controlled by implementing risk management measures. For substances classified as H304, the following measures need to be implemented to control the aspiration hazard.

Product safety-related measures: Do not ingest. If swallowed then seek immediate medical assistance. Do not induce vomiting.

**Product characteristics** : Liquid

**Concentration of substance in mixture or article** : Covers percentage substance in the product up to 100 %.

**Frequency and duration of use/exposure** : Covers daily exposures up to 8 hours (unless stated differently)

#### Conditions and measures related to personal protection, hygiene and health evaluation

**Advice on general occupational hygiene** : Assumes a good basic standard of occupational hygiene is implemented

## Section 3 - Exposure estimation and reference to its source

**Website:** : Not applicable.

### Exposure estimation and reference to its source - Environment: 1: General exposures

**Exposure assessment (environment):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

### Exposure estimation and reference to its source - Workers: 2: General measures applicable to all activities

**Exposure assessment (human):** : Not applicable.

**Exposure estimation and reference to its source** : Not applicable.

## Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

**Environment** : Not applicable.

**Health** : Available hazard data do not support the need for a DNEL to be established for other health effects.  
Risk management measures are based on qualitative risk characterisation.

## Additional good practice advice beyond the REACH CSA

**Environment** : Not available.

**Health** : Not available.

## Annex to the extended Safety Data Sheet (eSDS)

Consumer

### Identification of the substance or mixture

Product definition : UVCB  
Code : 1168364  
Product name : PC FLUIDS EXXSOL D220/230 (EU)

### Section 1 - Title

Short title of the exposure scenario : Use in coatings - Consumer

List of use descriptors : **Identified use name:** Use in coatings - Consumer  
**Sector of end use:** SU21  
**Subsequent service life relevant for that use:** No.  
**Environmental Release Category:** ERC08a, ERC08d  
**Market sector by type of chemical product:** PC01, PC04, PC08, PC09a, PC09b, PC09c, PC15, PC18, PC23, PC24, PC31, PC34

Environmental contributing scenarios : **General exposures** - ERC08a, ERC08d

Health Contributing scenarios : **General measures applicable to all activities** - PC01, PC04, PC08, PC09a, PC09b, PC09c, PC15, PC18, PC23, PC24, PC31, PC34

Processes and activities covered by the exposure scenario	: Covers the use in coatings (paints, inks, adhesives, etc) including exposures during use (including product transfer and preparation, application by brush, spray by hand or similar methods) and equipment cleaning.
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### Section 2 - Exposure controls

#### Contributing scenario controlling environmental exposure for 1: General exposures

Product characteristics : Not applicable.

Amounts used : Not applicable.

Frequency and duration of use : Not applicable.

Environment factors not influenced by risk management : Not applicable.

Other operational conditions of use affecting environmental exposure : Not applicable.

Conditions and measures related to municipal sewage treatment plant : Not applicable.

Conditions and measures related to external treatment of waste for disposal : Not applicable.

Conditions and measures related to external recovery of waste : Not applicable.

**Contributing scenario controlling consumer exposure for 2: General measures applicable to all activities**

## General measures (aspiration)

The H304 risk phrase (May be fatal if swallowed and enters airways) relates to potential for aspiration, a non-quantifiable hazard determined by physico-chemical properties (i.e. viscosity) that can occur during ingestion and also if it is vomited following ingestion. A DNEL cannot be derived. Risks from the physicochemical hazards of substances can be controlled by implementing risk management measures. For substances classified as H304, the following measures need to be implemented to control the aspiration hazard.

Product safety-related measures: Do not ingest. If swallowed then seek immediate medical assistance. Do not induce vomiting. Just a sip of lamp oil - or even sucking the wick of lamps - may lead to life-threatening lung damage. Keep lamps filled with this liquid out of the reach of children.

<b>Product characteristics</b>	: Liquid
<b>Amounts used</b>	: Not applicable.
<b>Frequency and duration of use/exposure</b>	: Not applicable.

**Conditions and measures related to personal protection and hygiene**

<b>Advice on general occupational hygiene</b>	: Not applicable.
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**Section 3 - Exposure estimation and reference to its source**

<b>Website:</b>	: Not applicable.
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**Exposure estimation and reference to its source - Environment: 1: General exposures**

<b>Exposure assessment (environment):</b>	: Not applicable.
<b>Exposure estimation and reference to its source</b>	: Not applicable.

**Exposure estimation and reference to its source - Consumers: 2: General measures applicable to all activities**

<b>Exposure assessment (human):</b>	: Not applicable.
<b>Exposure estimation and reference to its source</b>	: Not applicable.

**Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES**

<b>Environment</b>	: Not applicable.
<b>Health</b>	: Available hazard data do not support the need for a DNEL to be established for other health effects. Risk management measures are based on qualitative risk characterisation.

**Additional good practice advice beyond the REACH CSA**

<b>Environment</b>	: Not available.
<b>Health</b>	: Not available.

## Annex to the extended Safety Data Sheet (eSDS)

Consumer

### Identification of the substance or mixture

Product definition : UVCB  
Code : 1168364  
Product name : PC FLUIDS EXXSOL D220/230 (EU)

### Section 1 - Title

Short title of the exposure scenario : Use in cleaning agents - Consumer

List of use descriptors : **Identified use name:** Use in cleaning agents - Consumer  
**Sector of end use:** SU21  
**Subsequent service life relevant for that use:** No.  
**Environmental Release Category:** ERC08a, ERC08d  
**Market sector by type of chemical product:** PC03, PC04, PC08, PC09a, PC09b, PC09c, PC24, PC35, PC38

Environmental contributing scenarios : **General exposures** - ERC08a, ERC08d

Health Contributing scenarios : **General measures applicable to all activities** - PC03, PC04, PC08, PC09a, PC09b, PC09c, PC24, PC35, PC38

**Processes and activities covered by the exposure scenario** : Covers general exposures to consumers arising from the use of household products sold as washing and cleaning products, aerosols, coatings, de-icers, lubricants and air care products.

### Section 2 - Exposure controls

#### Contributing scenario controlling environmental exposure for 1: General exposures

Product characteristics : Not applicable.

Amounts used : Not applicable.

Frequency and duration of use : Not applicable.

Environment factors not influenced by risk management : Not applicable.

Other operational conditions of use affecting environmental exposure : Not applicable.

Conditions and measures related to municipal sewage treatment plant : Not applicable.

Conditions and measures related to external treatment of waste for disposal : Not applicable.

Conditions and measures related to external recovery of waste : Not applicable.

**Contributing scenario controlling consumer exposure for 2: General measures applicable to all activities**

## General measures (aspiration)

The H304 risk phrase (May be fatal if swallowed and enters airways) relates to potential for aspiration, a non-quantifiable hazard determined by physico-chemical properties (i.e. viscosity) that can occur during ingestion and also if it is vomited following ingestion. A DNEL cannot be derived. Risks from the physicochemical hazards of substances can be controlled by implementing risk management measures. For substances classified as H304, the following measures need to be implemented to control the aspiration hazard.

Product safety-related measures: Do not ingest. If swallowed then seek immediate medical assistance. Do not induce vomiting. Just a sip of lamp oil - or even sucking the wick of lamps - may lead to life-threatening lung damage. Keep lamps filled with this liquid out of the reach of children.

<b>Product characteristics</b>	: Liquid
<b>Amounts used</b>	: Not applicable.
<b>Frequency and duration of use/exposure</b>	: Not applicable.

**Conditions and measures related to personal protection and hygiene**

<b>Advice on general occupational hygiene</b>	: Not applicable.
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**Section 3 - Exposure estimation and reference to its source**

<b>Website:</b>	: Not applicable.
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**Exposure estimation and reference to its source - Environment: 1: General exposures**

<b>Exposure assessment (environment):</b>	: Not applicable.
<b>Exposure estimation and reference to its source</b>	: Not applicable.

**Exposure estimation and reference to its source - Consumers: 2: General measures applicable to all activities**

<b>Exposure assessment (human):</b>	: Not applicable.
<b>Exposure estimation and reference to its source</b>	: Not applicable.

**Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES**

<b>Environment</b>	: Not applicable.
<b>Health</b>	: Available hazard data do not support the need for a DNEL to be established for other health effects. Risk management measures are based on qualitative risk characterisation.

**Additional good practice advice beyond the REACH CSA**

<b>Environment</b>	: Not available.
<b>Health</b>	: Not available.

## Annex to the extended Safety Data Sheet (eSDS)

Consumer

### Identification of the substance or mixture

Product definition : UVCB  
Code : 1168364  
Product name : PC FLUIDS EXXSOL D220/230 (EU)

### Section 1 - Title

Short title of the exposure scenario : Lubricants - Consumer (Low release)  
List of use descriptors : **Identified use name:** Lubricants - Consumer (Low release)  
**Sector of end use:** SU21  
**Subsequent service life relevant for that use:** No.  
**Environmental Release Category:** ERC09a, ERC09b  
**Market sector by type of chemical product:** PC01, PC24, PC31  
Environmental contributing scenarios : **General exposures -** ERC09a, ERC09b  
Health Contributing scenarios : **General measures applicable to all activities -** PC01, PC24, PC31

<b>Processes and activities covered by the exposure scenario</b>	: Covers the consumer use of formulated lubricants in closed and open systems including transfer operations, application, operation of engines and similar articles, equipment maintenance and disposal of waste oil.
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### Section 2 - Exposure controls

#### Contributing scenario controlling environmental exposure for 1: General exposures

<b>Product characteristics</b>	: Not applicable.
<b>Amounts used</b>	: Not applicable.
<b>Frequency and duration of use</b>	: Not applicable.
<b>Environment factors not influenced by risk management</b>	: Not applicable.
<b>Other operational conditions of use affecting environmental exposure</b>	: Not applicable.
<b>Conditions and measures related to municipal sewage treatment plant</b>	: Not applicable.
<b>Conditions and measures related to external treatment of waste for disposal</b>	: Not applicable.
<b>Conditions and measures related to external recovery of waste</b>	: Not applicable.

**Contributing scenario controlling consumer exposure for 2: General measures applicable to all activities**

## General measures (aspiration)

The H304 risk phrase (May be fatal if swallowed and enters airways) relates to potential for aspiration, a non-quantifiable hazard determined by physico-chemical properties (i.e. viscosity) that can occur during ingestion and also if it is vomited following ingestion. A DNEL cannot be derived. Risks from the physicochemical hazards of substances can be controlled by implementing risk management measures. For substances classified as H304, the following measures need to be implemented to control the aspiration hazard.

Product safety-related measures: Do not ingest. If swallowed then seek immediate medical assistance. Do not induce vomiting. Just a sip of lamp oil - or even sucking the wick of lamps - may lead to life-threatening lung damage. Keep lamps filled with this liquid out of the reach of children.

<b>Product characteristics</b>	: Liquid
<b>Amounts used</b>	: Not applicable.
<b>Frequency and duration of use/exposure</b>	: Not applicable.

**Conditions and measures related to personal protection and hygiene**

<b>Advice on general occupational hygiene</b>	: Not applicable.
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**Section 3 - Exposure estimation and reference to its source**

<b>Website:</b>	: Not applicable.
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**Exposure estimation and reference to its source - Environment: 1: General exposures**

<b>Exposure assessment (environment):</b>	: Not applicable.
<b>Exposure estimation and reference to its source</b>	: Not applicable.

**Exposure estimation and reference to its source - Consumers: 2: General measures applicable to all activities**

<b>Exposure assessment (human):</b>	: Not applicable.
<b>Exposure estimation and reference to its source</b>	: Not applicable.

**Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES**

<b>Environment</b>	: Not applicable.
<b>Health</b>	: Available hazard data do not support the need for a DNEL to be established for other health effects. Risk management measures are based on qualitative risk characterisation.

**Additional good practice advice beyond the REACH CSA**

<b>Environment</b>	: Not available.
<b>Health</b>	: Not available.

## Annex to the extended Safety Data Sheet (eSDS)

Consumer

### Identification of the substance or mixture

Product definition : UVCB  
Code : 1168364  
Product name : PC FLUIDS EXXSOL D220/230 (EU)

### Section 1 - Title

Short title of the exposure scenario : Lubricants - Consumer (high release)  
List of use descriptors : **Identified use name:** Lubricants - Consumer (high release)  
**Sector of end use:** SU21  
**Subsequent service life relevant for that use:** No.  
**Environmental Release Category:** ERC08a, ERC08d  
**Market sector by type of chemical product:** PC01, PC24, PC31  
Environmental contributing scenarios : **General exposures -** ERC08a, ERC08d  
Health Contributing scenarios : **General measures applicable to all activities -** PC01, PC24, PC31

<b>Processes and activities covered by the exposure scenario</b>	: Covers the consumer use of formulated lubricants in closed and open systems including transfer operations, application, operation of engines and similar articles, equipment maintenance and disposal of waste oil.
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### Section 2 - Exposure controls

#### Contributing scenario controlling environmental exposure for 1: **General exposures**

<b>Product characteristics</b>	: Not applicable.
<b>Amounts used</b>	: Not applicable.
<b>Frequency and duration of use</b>	: Not applicable.
<b>Environment factors not influenced by risk management</b>	: Not applicable.
<b>Other operational conditions of use affecting environmental exposure</b>	: Not applicable.
<b>Conditions and measures related to municipal sewage treatment plant</b>	: Not applicable.
<b>Conditions and measures related to external treatment of waste for disposal</b>	: Not applicable.
<b>Conditions and measures related to external recovery of waste</b>	: Not applicable.

**Contributing scenario controlling consumer exposure for 2: General measures applicable to all activities**

## General measures (aspiration)

The H304 risk phrase (May be fatal if swallowed and enters airways) relates to potential for aspiration, a non-quantifiable hazard determined by physico-chemical properties (i.e. viscosity) that can occur during ingestion and also if it is vomited following ingestion. A DNEL cannot be derived. Risks from the physicochemical hazards of substances can be controlled by implementing risk management measures. For substances classified as H304, the following measures need to be implemented to control the aspiration hazard.

Product safety-related measures: Do not ingest. If swallowed then seek immediate medical assistance. Do not induce vomiting. Just a sip of lamp oil - or even sucking the wick of lamps - may lead to life-threatening lung damage. Keep lamps filled with this liquid out of the reach of children.

<b>Product characteristics</b>	: Liquid
<b>Amounts used</b>	: Not applicable.
<b>Frequency and duration of use/exposure</b>	: Not applicable.

**Conditions and measures related to personal protection and hygiene**

<b>Advice on general occupational hygiene</b>	: Not applicable.
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**Section 3 - Exposure estimation and reference to its source**

<b>Website:</b>	: Not applicable.
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**Exposure estimation and reference to its source - Environment: 1: General exposures**

<b>Exposure assessment (environment):</b>	: Not applicable.
<b>Exposure estimation and reference to its source</b>	: Not applicable.

**Exposure estimation and reference to its source - Consumers: 2: General measures applicable to all activities**

<b>Exposure assessment (human):</b>	: Not applicable.
<b>Exposure estimation and reference to its source</b>	: Not applicable.

**Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES**

<b>Environment</b>	: Not applicable.
<b>Health</b>	: Available hazard data do not support the need for a DNEL to be established for other health effects. Risk management measures are based on qualitative risk characterisation.

**Additional good practice advice beyond the REACH CSA**

<b>Environment</b>	: Not available.
<b>Health</b>	: Not available.

## Annex to the extended Safety Data Sheet (eSDS)

Consumer

### Identification of the substance or mixture

Product definition : UVCB  
Code : 1168364  
Product name : PC FLUIDS EXXSOL D220/230 (EU)

### Section 1 - Title

Short title of the exposure scenario : Use as a fuel - Consumer  
List of use descriptors : **Identified use name:** Use as a fuel - Consumer  
**Sector of end use:** SU21  
**Subsequent service life relevant for that use:** No.  
**Environmental Release Category:** ERC09a, ERC09b  
**Market sector by type of chemical product:** PC13  
Environmental contributing scenarios : **General exposures -** ERC09a, ERC09b  
Health Contributing scenarios : **General measures applicable to all activities -** PC13

Processes and activities covered by the exposure scenario	: Covers consumer uses in liquid fuels.
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### Section 2 - Exposure controls

#### Contributing scenario controlling environmental exposure for 1: General exposures

Product characteristics	: Not applicable.
Amounts used	: Not applicable.
Frequency and duration of use	: Not applicable.
Environment factors not influenced by risk management	: Not applicable.
Other operational conditions of use affecting environmental exposure	: Not applicable.
Conditions and measures related to municipal sewage treatment plant	: Not applicable.
Conditions and measures related to external treatment of waste for disposal	: Not applicable.
Conditions and measures related to external recovery of waste	: Not applicable.

**Contributing scenario controlling consumer exposure for 2: General measures applicable to all activities**

## General measures (aspiration)

The H304 risk phrase (May be fatal if swallowed and enters airways) relates to potential for aspiration, a non-quantifiable hazard determined by physico-chemical properties (i.e. viscosity) that can occur during ingestion and also if it is vomited following ingestion. A DNEL cannot be derived. Risks from the physicochemical hazards of substances can be controlled by implementing risk management measures. For substances classified as H304, the following measures need to be implemented to control the aspiration hazard.

Product safety-related measures: Do not ingest. If swallowed then seek immediate medical assistance. Do not induce vomiting. Just a sip of lamp oil - or even sucking the wick of lamps - may lead to life-threatening lung damage. Keep lamps filled with this liquid out of the reach of children.

<b>Product characteristics</b>	: Liquid
<b>Amounts used</b>	: Not applicable.
<b>Frequency and duration of use/exposure</b>	: Not applicable.

**Conditions and measures related to personal protection and hygiene**

<b>Advice on general occupational hygiene</b>	: Not applicable.
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**Section 3 - Exposure estimation and reference to its source**

<b>Website:</b>	: Not applicable.
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**Exposure estimation and reference to its source - Environment: 1: General exposures**

<b>Exposure assessment (environment):</b>	: Not applicable.
<b>Exposure estimation and reference to its source</b>	: Not applicable.

**Exposure estimation and reference to its source - Consumers: 2: General measures applicable to all activities**

<b>Exposure assessment (human):</b>	: Not applicable.
<b>Exposure estimation and reference to its source</b>	: Not applicable.

**Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES**

<b>Environment</b>	: Not applicable.
<b>Health</b>	: Available hazard data do not support the need for a DNEL to be established for other health effects. Risk management measures are based on qualitative risk characterisation.

**Additional good practice advice beyond the REACH CSA**

<b>Environment</b>	: Not available.
<b>Health</b>	: Not available.

## Annex to the extended Safety Data Sheet (eSDS)

Consumer

### Identification of the substance or mixture

Product definition : UVCB  
Code : 1168364  
Product name : PC FLUIDS EXXSOL D220/230 (EU)

### Section 1 - Title

Short title of the exposure scenario : Functional fluids - Consumer  
List of use descriptors : **Identified use name:** Functional fluids - Consumer  
**Sector of end use:** SU21  
**Subsequent service life relevant for that use:** No.  
**Environmental Release Category:** ERC09a, ERC09b  
**Market sector by type of chemical product:** PC16, PC17  
Environmental contributing scenarios : **General exposures -** ERC09a, ERC09b  
Health Contributing scenarios : **General measures applicable to all activities -** PC16, PC17

Processes and activities covered by the exposure scenario	: Use of sealed items containing functional fluids e.g. transfer oils, hydraulic fluids, refrigerants
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### Section 2 - Exposure controls

#### Contributing scenario controlling environmental exposure for 1: General exposures

Product characteristics	: Not applicable.
Amounts used	: Not applicable.
Frequency and duration of use	: Not applicable.
Environment factors not influenced by risk management	: Not applicable.
Other operational conditions of use affecting environmental exposure	: Not applicable.
Conditions and measures related to municipal sewage treatment plant	: Not applicable.
Conditions and measures related to external treatment of waste for disposal	: Not applicable.
Conditions and measures related to external recovery of waste	: Not applicable.

**Contributing scenario controlling consumer exposure for 2: General measures applicable to all activities**

## General measures (aspiration)

The H304 risk phrase (May be fatal if swallowed and enters airways) relates to potential for aspiration, a non-quantifiable hazard determined by physico-chemical properties (i.e. viscosity) that can occur during ingestion and also if it is vomited following ingestion. A DNEL cannot be derived. Risks from the physicochemical hazards of substances can be controlled by implementing risk management measures. For substances classified as H304, the following measures need to be implemented to control the aspiration hazard.

Product safety-related measures: Do not ingest. If swallowed then seek immediate medical assistance. Do not induce vomiting. Just a sip of lamp oil - or even sucking the wick of lamps - may lead to life-threatening lung damage. Keep lamps filled with this liquid out of the reach of children.

<b>Product characteristics</b>	: Liquid
<b>Amounts used</b>	: Not applicable.
<b>Frequency and duration of use/exposure</b>	: Not applicable.

**Conditions and measures related to personal protection and hygiene**

<b>Advice on general occupational hygiene</b>	: Not applicable.
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**Section 3 - Exposure estimation and reference to its source**

<b>Website:</b>	: Not applicable.
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**Exposure estimation and reference to its source - Environment: 1: General exposures**

<b>Exposure assessment (environment):</b>	: Not applicable.
<b>Exposure estimation and reference to its source</b>	: Not applicable.

**Exposure estimation and reference to its source - Consumers: 2: General measures applicable to all activities**

<b>Exposure assessment (human):</b>	: Not applicable.
<b>Exposure estimation and reference to its source</b>	: Not applicable.

**Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES**

<b>Environment</b>	: Not applicable.
<b>Health</b>	: Available hazard data do not support the need for a DNEL to be established for other health effects. Risk management measures are based on qualitative risk characterisation.

**Additional good practice advice beyond the REACH CSA**

<b>Environment</b>	: Not available.
<b>Health</b>	: Not available.

## Annex to the extended Safety Data Sheet (eSDS)

Consumer

### Identification of the substance or mixture

Product definition : UVCB  
Code : 1168364  
Product name : PC FLUIDS EXXSOL D220/230 (EU)

### Section 1 - Title

Short title of the exposure scenario : Other consumer uses

List of use descriptors : **Identified use name:** Other consumer uses  
**Sector of end use:** SU21  
**Subsequent service life relevant for that use:** No.  
**Environmental Release Category:** ERC08a, ERC08d  
**Market sector by type of chemical product:** PC28, PC39

Environmental contributing scenarios : **General exposures -** ERC08a, ERC08d

Health Contributing scenarios : **General measures applicable to all activities -** PC28, PC39

Processes and activities covered by the exposure scenario	: Consumer uses e.g. as a carrier in cosmetics/personal care products, perfumes and fragrances. Note: For cosmetic and personal care products, risk assessment only required for the environment under REACH as human health is covered by alternative legislation.
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### Section 2 - Exposure controls

#### Contributing scenario controlling environmental exposure for 1: General exposures

Product characteristics : Not applicable.

Amounts used : Not applicable.

Frequency and duration of use : Not applicable.

Environment factors not influenced by risk management : Not applicable.

Other operational conditions of use affecting environmental exposure : Not applicable.

Conditions and measures related to municipal sewage treatment plant : Not applicable.

Conditions and measures related to external treatment of waste for disposal : Not applicable.

Conditions and measures related to external recovery of waste : Not applicable.

**Contributing scenario controlling consumer exposure for 2: General measures applicable to all activities**

## General measures (aspiration)

The H304 risk phrase (May be fatal if swallowed and enters airways) relates to potential for aspiration, a non-quantifiable hazard determined by physico-chemical properties (i.e. viscosity) that can occur during ingestion and also if it is vomited following ingestion. A DNEL cannot be derived. Risks from the physicochemical hazards of substances can be controlled by implementing risk management measures. For substances classified as H304, the following measures need to be implemented to control the aspiration hazard.

Product safety-related measures: Do not ingest. If swallowed then seek immediate medical assistance. Do not induce vomiting. Just a sip of lamp oil - or even sucking the wick of lamps - may lead to life-threatening lung damage. Keep lamps filled with this liquid out of the reach of children.

<b>Product characteristics</b>	: Liquid
<b>Amounts used</b>	: Not applicable.
<b>Frequency and duration of use/exposure</b>	: Not applicable.

**Conditions and measures related to personal protection and hygiene**

<b>Advice on general occupational hygiene</b>	: Not applicable.
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**Section 3 - Exposure estimation and reference to its source**

<b>Website:</b>	: Not applicable.
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**Exposure estimation and reference to its source - Environment: 1: General exposures**

<b>Exposure assessment (environment):</b>	: Not applicable.
<b>Exposure estimation and reference to its source</b>	: Not applicable.

**Exposure estimation and reference to its source - Consumers: 2: General measures applicable to all activities**

<b>Exposure assessment (human):</b>	: Not applicable.
<b>Exposure estimation and reference to its source</b>	: Not applicable.

**Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES**

<b>Environment</b>	: Not applicable.
<b>Health</b>	: Available hazard data do not support the need for a DNEL to be established for other health effects. Risk management measures are based on qualitative risk characterisation.

**Additional good practice advice beyond the REACH CSA**

<b>Environment</b>	: Not available.
<b>Health</b>	: Not available.

## Annex to the extended Safety Data Sheet (eSDS)

Consumer

### Identification of the substance or mixture

Product definition : UVCB  
Code : 1168364  
Product name : PC FLUIDS EXXSOL D220/230 (EU)

### Section 1 - Title

Short title of the exposure scenario : Use in agrochemicals - Consumer  
List of use descriptors : **Identified use name:** Use in agrochemicals - Consumer  
**Sector of end use:** SU21  
**Subsequent service life relevant for that use:** No.  
**Environmental Release Category:** ERC08a, ERC08d  
**Market sector by type of chemical product:** PC12, PC27  
Environmental contributing scenarios : **General exposures** - ERC08a, ERC08d  
Health Contributing scenarios : **General measures applicable to all activities** - PC12, PC27

Processes and activities covered by the exposure scenario	: Covers the consumer use in agrochemicals in liquid and solid forms.
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### Section 2 - Exposure controls

#### Contributing scenario controlling environmental exposure for 1: General exposures

Product characteristics	: Not applicable.
Amounts used	: Not applicable.
Frequency and duration of use	: Not applicable.
Environment factors not influenced by risk management	: Not applicable.
Other operational conditions of use affecting environmental exposure	: Not applicable.
Conditions and measures related to municipal sewage treatment plant	: Not applicable.
Conditions and measures related to external treatment of waste for disposal	: Not applicable.
Conditions and measures related to external recovery of waste	: Not applicable.

**Contributing scenario controlling consumer exposure for 2: General measures applicable to all activities**

## General measures (aspiration)

The H304 risk phrase (May be fatal if swallowed and enters airways) relates to potential for aspiration, a non-quantifiable hazard determined by physico-chemical properties (i.e. viscosity) that can occur during ingestion and also if it is vomited following ingestion. A DNEL cannot be derived. Risks from the physicochemical hazards of substances can be controlled by implementing risk management measures. For substances classified as H304, the following measures need to be implemented to control the aspiration hazard.

Product safety-related measures: Do not ingest. If swallowed then seek immediate medical assistance. Do not induce vomiting. Just a sip of lamp oil - or even sucking the wick of lamps - may lead to life-threatening lung damage. Keep lamps filled with this liquid out of the reach of children.

<b>Product characteristics</b>	: Liquid
<b>Amounts used</b>	: Not applicable.
<b>Frequency and duration of use/exposure</b>	: Not applicable.

**Conditions and measures related to personal protection and hygiene**

<b>Advice on general occupational hygiene</b>	: Not applicable.
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**Section 3 - Exposure estimation and reference to its source**

<b>Website:</b>	: Not applicable.
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**Exposure estimation and reference to its source - Environment: 1: General exposures**

<b>Exposure assessment (environment):</b>	: Not applicable.
<b>Exposure estimation and reference to its source</b>	: Not applicable.

**Exposure estimation and reference to its source - Consumers: 2: General measures applicable to all activities**

<b>Exposure assessment (human):</b>	: Not applicable.
<b>Exposure estimation and reference to its source</b>	: Not applicable.

**Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES**

<b>Environment</b>	: Not applicable.
<b>Health</b>	: Available hazard data do not support the need for a DNEL to be established for other health effects. Risk management measures are based on qualitative risk characterisation.

**Additional good practice advice beyond the REACH CSA**

<b>Environment</b>	: Not available.
<b>Health</b>	: Not available.

