

Product Safety Summary

JAYFLEX DINA



This Product Safety Summary document is a high-level summary intended to provide the general public with an overview of product safety information on this chemical substance. It is not intended to provide emergency response, medical or treatment information, or to provide a discussion of all safety and health information. This document is not intended to replace the (Material) Safety Data Sheet. Warnings and handling precautions provided below are not intended to replace or supersede manufacturers' instructions and warning for their consumer products which may contain this chemical substance.

1. Chemical Identity

Jayflex DINA is a high molecular weight adipate plasticizer used primarily in flexible PV applications.

CAS No.

33703-08-1

Other Names:

Hexanedioic acid, 1,6-diisononyl ester

Other Names:

Diisononyl adipate (DINA)
Adipic acid, diisononyl ester

2. Product Uses

Jayflex DINA is a secondary plasticizer typically used in blends with general-purpose plasticizers like for example DINP, DIDP to improve low-temperature properties of flexible PVC. The plasticizer can be used as the primary plasticizer for flexible PVC when extremely low- temperature cold flexibility is required like for example in films and shrink wrap.

3. Physical / Chemical Properties

Jayflex DINA is a non-hazardous material. The material is classified as a static accumulator. Although the material has a relatively low vapor pressure, it should be handled only with adequate ventilation. The flash point for Jayflex DINA is 442°F / 228°C.

4. Health Information

Jayflex DINA is generally recognized to have low acute toxicity if ingested, inhaled or after skin contact. This material is expected to present a low risk for chronic toxicity. Vaporizing or aerosolizing these products should be avoided. Excessive exposure can cause eye, skin or lung irritation. If prolonged or repeated skin contact is likely, the use of chemical resistant gloves is recommended. Jayflex DINA is not regarded as a mutagen or carcinogen, and there is low concern for reproductive, developmental, or nervous system toxic effects.

5. Additional Hazard Information

No special requirements under ordinary conditions of use and with adequate ventilation.

6. Food Contact Regulated Uses

Appropriate manufacturing and distribution practices are employed to ensure the quality of this product offered for use as in food contact applications.

7. Environmental Information

Jayflex DINA biodegrades and will not persist in the environment. This material is not expected to cause short-term toxicity to fish or other aquatic organisms because of its low solubility in water. Long-term effects (chronic aquatic toxicity) are not expected because of low toxicity and biodegradation that results in a low potential for chronic exposure to aquatic organisms (following, for example, an accidental spill).

8. Exposure Potential

Based on the uses for Jayflex DINA, the public could be exposed through:

Workplace exposure – This refers to potential exposure in a manufacturing facility or through evaporation in various industrial applications. Generally, exposure of personnel in manufacturing facilities is relatively low because the process, storage and handling operations are enclosed.

Consumer use of products containing Jayflex DINA – This category of exposure is highly variable depending on the type of product used and the conditions under which it is used. Exposure of the majority of consumers to commercial Jayflex DINA sources is not expected. If exposure does occur, it is likely to be infrequent and of short duration. The best way to prevent exposure to vapors is to work in well-ventilated areas.

Environmental releases – As a chemical manufacturer, we are committed to operating in an environmentally responsible manner everywhere we do business. Our efforts are guided by in-depth scientific understanding of the environmental impact of our operations, as well as by the social and economic needs of the communities in which we operate. Industrial spills or releases are rare; however a spill may pose a significant flammability issue. Our operational improvement targets and plans are based on driving incidents with real environmental impact to zero and delivering superior environmental performance.

9. Manufacture of Product

Process – Jayflex DINA is produced by esterification of branched isononyl alcohols with adipic acid in the presence of a catalyst. The isononyl alcohol, composed of C8 to C10 branched alcohols (predominantly C9), is obtained from a higher olefin, octene, derived from propylene and butene.

10. Risk Management

Workplace Risk Management – When using this product, ensure that there is adequate ventilation. Always use chemical resistant gloves to protect your hands and skin and always wear eye protection such as chemical goggles. Do not eat, drink, or smoke where Jayflex DINA is handled, processed, or stored. Wash hands and skin following contact. If Jayflex DINA gets into your eyes, rinse eyes thoroughly for at least 15 minutes with tap water and seek medical attention. Please refer to the Safety Data Sheet.

Consumer Risk Management - This chemical is not sold directly to the public for general consumer uses. As a result of its use in plasticizer applications, exposure of the majority of consumers is not expected. If exposure should occur, it is expected to be infrequent and of short duration. Always follow manufacturers' instructions, warnings and handling precautions when using their products.

11. Regulatory Information

Regulations may exist that govern the manufacture, sale, transportation, use and/or disposal of this chemical and may vary by city, state, country or geographic region. Additional helpful information may be found by consulting the relevant ExxonMobil Safety Data Sheet at:

<http://www.msds.exxonmobil.com>

12. Conclusion Statements

Jayflex DINA . . .

is a widely used plasticizer in shrink warp and electrical wire jacket applications.

is low in toxicity.

does not cause adverse health or environmental effects at levels typically found in the workplace or environment.

has a low vapor pressure; use only with good ventilation.

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