

# Product Safety Summary



## Synesstic™ Alkylated Naphthalene

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

Synesstic™ 5

Synesstic™ 12

Synesstic™ Alkylated Naphthalene (AN) products are manufactured by the catalytic alkylation of linear alpha olefins to naphthalene.

**CAS No:** Various

**Chemical Name:** Alkylated Aromatics

### 2. Product Uses

Alkylated Naphthalene products are sold to lubricant manufacturers that provide a variety of industrial and consumer products including synthetic and semi-synthetic lubricants. Applications include:

- Automobile and diesel engine lubricants
- Automatic transmission fluids
- Automotive gear lubricants
- Industrial fluids such as hydraulic fluids, gear and bearing lubricants
- Greases for automotive and industrial applications.

Synesstic™ Alkylated Naphthalenes are not sold directly to the public for general consumer uses.

### 3. Physical / Chemical Properties

Alkylated Naphthalene products are amber liquids with well-defined structures. Alkylated Naphthalene products are not combustible or flammable, and have a relatively low vapor pressure. They are chemically stable under normal conditions of handling and use. Contact with substances that are considered strong oxidizers should be avoided. The flash point for Alkylated Naphthalenes are typically greater than 400°F / 205°C.

### 4. Health Information

Alkylated Naphthalene products have been studied extensively and are generally recognized to have minimal acute and chronic toxicity. Vaporizing or aerosolizing these products should be avoided. No respiratory protection is ordinarily required under normal conditions of use and with adequate ventilation. No skin protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions such as the use of chemical resistant gloves should be taken to avoid prolonged skin contact.

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### 5. Additional Hazard Information

In the unlikely event that this product is injected into or under the skin, or into any part of the body, the individual should be evaluated immediately by a physician as a surgical emergency regardless of the appearance of the wound or its size. When used in high pressure or hydraulic applications, the initial symptoms from high pressure injection may be minimal or absent. However, early surgical treatment, i.e., within the first few hours, may significantly reduce the ultimate extent of injury. Wash contact areas with soap and water.

### 6. Food Contact Regulated Uses

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

### 7. Environmental Information

These materials are expected to be inherently biodegradable and will not persist in the environment. Alkylated Naphthalene products are not expected to cause acute or chronic toxicity to fish or other aquatic organisms.

### 8. Exposure Potential

Based on the uses of Alkylated Naphthalene products, the public could be exposed through:

- **Workplace exposure** – This refers to potential exposure in a manufacturing facility or various industrial applications. Generally, exposure of personnel in manufacturing facilities is relatively low due to the predominantly enclosed nature of the process, storage and handling operations.
- **Consumer use of products containing Alkylated Naphthalene** – These chemicals are not sold directly to the public for general consumer uses. If exposure should occur, it is likely to be infrequent and of short duration depending on the products used and the conditions under which they are used. Exposure could occur through the use of commercial lubricant formulations that contain this product. The best way to prevent exposure to vapors is to work in well-ventilated areas, wear chemical resistant gloves, and follow good personal hygiene practices
- **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. 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** – The process begins when Ethylene is oligomerized (linked together chemically) to create even numbered linear alpha olefins (LAO's) that range from C<sub>4</sub> to C<sub>22</sub> and higher. From this family, LAO's are selected to become part of the feed stream to manufacture the Synesstic products. The LAO molecules are then "linked" to the naphthalene molecules in the presence of a catalyst.

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### 10. Risk Management

- **Workplace Risk Management** – If significant vapors/fumes are generated during thermal processing of this product, it is recommended that work stations be monitored for the presence of thermal degradation by-products which may evolve at elevated temperatures (for example, oxygenated components). When handling hot molten material, wear heat resistant gloves to protect your hands and skin. Please refer to the (Material) Safety Data Sheet
- **Consumer Risk Management** - This product is not sold directly to the public for general consumer uses but may be incorporated by converters into consumer products as highlighted in Section 2. Although we do not control how the Alkylated Naphthalenes are used in the final consumer products, if they are manufactured properly, risk from chemical exposure to material using these products is expected to be negligible when the product is used as intended and under normal conditions of use.

### 12. Regulatory Information

Regulations may exist that govern the manufacture, sale, transportation, use and/or disposal of this product. These regulations may vary by city, state, country or geographic region. Additional helpful information may be found by consulting the relevant (Material) Safety Data Sheet.

<http://www.msds.exxonmobil.com/psims/psims.aspx?brand=xomcc>

### 13. Conclusion Statements

Synesstic™ Alkylated Naphthalenes:

- Are a widely used synthetic lubricant base stock.
- Are expected to exhibit a low order of toxicity to human health and the environment.
- Are not expected to cause adverse health or environmental effects at levels typically found in the workplace or environment.

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