

NACOL Ether 8

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

| | | |
|-----------------------|--|----------------|
| Trade name | NACOL Ether 8 | |
| Synonyms | Di-n-octyl; Dicaprylyl ether | |
| Use | Industrial use, Anti-foaming agent | |
| Company | Sasol Chemicals (USA) LLC (an affiliate of Sasol Chemicals North America LLC) | |
| Address | 12120 Wickchester Lane, Houston, TX 77079 | |
| Telephone | CHEMTREC North America Transportation Emergency (24-hr) | (800) 424 9300 |
| | CHEMTREC World Wide | (703) 527-3887 |
| | Other Emergencies (24-hr) | (337) 494 5142 |
| | SDS and Product Information (8:00am-4:30pm CST) | (281) 588 3491 |
| | Health and Safety Information (7:30am-4:00pm CST) | (281) 588 3492 |
| E-mail address | SasolElectronicSDS@us.sasol.com | |

SECTION 2 HAZARDS IDENTIFICATION

Not a hazardous substance or mixture according to OSHA HCS 2012.

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

| <u>Components</u> | <u>CAS-No.</u> | <u>Weight percent</u> |
|-------------------|----------------|-----------------------|
| Dioctyl ether | 629-82-3 | 100 |

See Section 8 for Exposure Guidelines and Section 15 for Regulatory Classifications.

SECTION 4 FIRST AID MEASURES

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| Eye contact | Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. |
| Skin contact | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician. |
| Inhalation | Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. In case of shortness of breath, give oxygen. Call a physician immediately. |
| Ingestion | Do not induce vomiting without medical advice. Call a physician immediately. Never give anything by mouth to an unconscious person. |

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SECTION 5 FIREFIGHTING MEASURES

FLAMMABLE PROPERTIES

Fire/explosion NFPA Class IIIB combustible liquid.

Suitable extinguishing media Water spray, Foam, Dry chemical, Carbon dioxide (CO₂)

Protective equipment and precautions for firefighters Wear self-contained breathing apparatus and protective suit.

Further information Keep containers and surroundings cool with water spray.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Methods and materials for containment and cleaning up Remove all sources of ignition. Ensure adequate ventilation. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Do not flush into surface water or sanitary sewer system.

SECTION 7 HANDLING AND STORAGE

Safe handling advice Normal measures for preventive fire protection.

Storage/Transport pressure Ambient

Load/Unload temperature Ambient

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING MEASURES

Ensure adequate ventilation, especially in confined areas.

PERSONAL PROTECTIVE EQUIPMENT

Eyes Wear as appropriate: Goggles, Face-shield

Skin Wear suitable protective clothing, gloves and eye/face protection.

Inhalation Respiratory protection is normally not required except in emergencies or when conditions cause excessive airborne levels of mists or vapors. Use NIOSH approved respiratory protection.

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EXPOSURE GUIDELINES

Contains no substances with occupational exposure limit values.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

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| Appearance | liquid; 20 °C, 1,013 hPa |
| Colour | clear, colourless |
| Form | liquid |
| Odour | characteristic |
| Odour Threshold | No data available |
| Flash point | 135.5 °C, 276 °F; |
| Flammability | Upper explosion limit: No data available Lower explosion limit: No data available |
| Boiling point/boiling range | > 207 °C, > 405 °F; OECD Test Guideline 103; |
| Melting point/range | Pour point: approximately -7 °C, 19 °F; |
| Auto-ignition temperature | Not applicable |
| Decomposition temperature | No data available |
| Flammability (solid, gas) | Not applicable |
| Vapour pressure | < 0.4 hPa @ 20 °C, 68 °F; OECD Test Guideline 104; |
| Vapour density | No data available |
| Density | 0.807 g/cm ³ @ 20 °C, 68 °F; OECD Test Guideline 109; |
| Relative density | No data available |
| Water solubility | insoluble |
| Viscosity | 4.5 mm ² /s @ 20 °C, 68 °F; |
| Viscosity, dynamic | 3.7 mPa.s @ 20 °C, 68 °F; OECD Test Guideline 114; |

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| pH | Not applicable |
| Evaporation rate | No data available |
| Partition coefficient: n-octanol/water | log Pow: > 5.7; @ 23 °C, 73.4 °F; |

SECTION 10 STABILITY AND REACTIVITY

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| Reactivity | Stable at normal ambient temperature and pressure. |
| Chemical stability | No decomposition if stored and applied as directed. |
| Conditions to avoid | Stable under recommended storage conditions. Keep away from heat and sources of ignition. |
| Hazardous decomposition products | None. |
| Materials to avoid | Can react with strong oxidizers, inorganic acids, and halogens. |
| Hazardous polymerisation | None. |

SECTION 11 TOXICOLOGICAL INFORMATION

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| Acute dermal toxicity | LD50 Rat: > 2,000 mg/kg; OECD Test Guideline 402 (literature value) |
| Acute inhalation toxicity | Negligible or unlikely exposure pathways |
| Acute oral toxicity | LD50 Rat: > 2,000 mg/kg; OECD Test Guideline 401 (literature value) |
| Skin corrosion/irritation | (human skin) Slightly irritating (does not meet classification criteria) (literature value) |
| Serious eye damage/eye irritation | (Rabbit): OECD Test Guideline 405 slight irritation (literature value) |
| Respiratory or skin sensitisation | Guinea pig: not sensitizing; Maximisation Test (literature value) |

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| Germ cell mutagenicity | Genotoxicity in vitro: In vitro tests did not show mutagenic effects |
| | Genotoxicity in vivo: No data available |
| | Assessment Mutagenicity: Based on available data, the classification criteria are not met. |
| Reproductive toxicity | Reproductive toxicity: No embryotoxic effects have been observed in animal tests. |
| | Assessment Reproductive toxicity: Based on available data, the classification criteria are not met. |
| | Teratogenicity: Rat; Oral; 14-day; OECD Test Guideline 414 NOAEL (teratogen): 1,000 mg/kg NOAEL (maternal): 1,000 mg/kg (literature value) |
| | Assessment teratogenicity: Based on available data, the classification criteria are not met. |
| STOT - single exposure | The substance or mixture is not classified as specific target organ toxicant, single exposure. |
| STOT - repeated exposure | Rat; Oral; 90-day; OECD Test Guideline 408 NOAEL: 1,000 mg/kg (literature value) Based on available data, the classification criteria are not met. |
| Aspiration toxicity | Not applicable |
| Carcinogenicity | Assessment carcinogenicity: Contains no ingredient listed as a carcinogen |

SECTION 12 ECOLOGICAL INFORMATION

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| Toxicity to fish | LC50 (Danio rerio (zebra fish)) 96 hours: > 100 mg/l; semi-static test; ISO 7346/2 (literature value) |
| Toxicity to aquatic invertebrates | EC50 (Daphnia magna (Water flea)) 48 hours: > 100 mg/l; static test; OECD Test Guideline 202 (literature value) |
| Toxicity to algae | EC50 (Desmodesmus subspicatus (green algae)) 72 hours: > 10 - 100 mg/l; static test; OECD Test Guideline 201 |

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| | (literature value) |
| Chronic toxicity to fish | No data available |
| Chronic toxicity to aquatic invertebrates | NOEC (Daphnia magna (Water flea)) 21 d: 12.5 mg/l; semi-static test; OECD Test Guideline 211 (literature value) |
| Biodegradation | Readily biodegradable. OECD Test Guideline 301B (28 d): > 60 % (literature value) |
| Bioaccumulative potential | Bioaccumulation is unlikely. |
| Mobility in soil | Adsorption/Soil; OECD Test Guideline 121 log K _{oc} : > 4.1 The substance and its relevant degradation products decompose rapidly. |
| Other adverse effects | No data available |

SECTION 13 DISPOSAL CONSIDERATIONS

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| Waste Code | Any unused product or empty containers may be disposed of as non-hazardous in accordance with state and federal requirements. Re-evaluation of the product may be required by the user at the time of disposal, since the product uses, transformations, mixtures, contamination, and spillage may change the classification. If the resulting material is determined to be hazardous, please dispose in accordance with state and federal (40 CFR 262) hazardous waste regulations. |
| Disposal methods | Dispose of only in accordance with local, state, and federal regulations. |
| Empty containers. | Empty containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, 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. Empty drums should be completely drained, triple-rinsed, properly bunged and promptly returned to a drum reconditioner, or properly disposed. |

SECTION 14 TRANSPORT INFORMATION

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| DOT | not regulated |
| IATA | not regulated |
| IMDG | not regulated |

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Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Remarks No data available

SECTION 15 REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

TSCA Inventory Listing

Components

Octane, 1,1'-oxybis-

All chemical substances in this product are either on the TSCA Active Inventory, or in compliance with the inventory.

CAS-No.

629-82-3

SARA 302 Status

Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

CAS-No.

Weight percent

SARA 311/312 Classification

Non-hazardous substance

SARA 313 Chemical

Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

CAS-No.

Weight percent

US. EPA CERCLA Hazardous Substances (40 CFR 302)

Components

none

Reportable Quantity

Weight percent

INTERNATIONAL REGULATIONS

WHMIS Classification

Not a dangerous substance or mixture according to the Globally Harmonised System (GHS).

European Union

The product does not need to be labelled in accordance with EC directives or respective national laws.

Australia. Inventory of Chemical Substances (AICS)

Listed

Japan. Inventory of Existing and New Chemical Substances (ENCS)

Listed

Japan. ISHL - Inventory of Chemical Substances

Listed

Canada. Domestic Substances List (DSL) Inventory

Not listed

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| Canada. Non-Domestic Substance Listing (NDSL) | Listed |
| Philippines. Inventory of Chemicals / Chemical Substances (PICCS) | Listed |
| Korea. Existing Chemicals Inventory (KECI) | Listed |
| China. Inventory of Existing Chemical Substances (IECSC) | Listed |
| Mexico. National Inventory of Chemical Substances (INSQ) | Not listed |
| New Zealand. Inventory of Chemical Substances (NZIoC) | Listed |
| Switzerland. Inventory of Notified New Substances (CHINV) | Listed |
| Taiwan. National Existing Chemical Inventory (NECI) | Listed |

Please note: The names and CAS numbers which are used for this product in the stated inventories may deviate from the information which is listed in Section 3.

STATE REGULATIONS

California Prop. 65
Components
 none

CAS-No.

SECTION 16 OTHER INFORMATION

HAZARD RATINGS

| | <u>Health</u> | <u>Flammability</u> | <u>Physical Hazard/ Instability</u> |
|-------|---------------|---------------------|---|
| HMIS® | 1 | 1 | 0 |
| NFPA | 1 | 1 | 0 |

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