

3. Composition/information on ingredients

Mixtures

| Chemical name | Common name and synonyms | CAS number | % |
|--|--------------------------|--------------|---------|
| SEVERELY-HYDROTREATED NAPHTHENIC PETROLEUM DISTILLATES | | 64742-52-5 | 40 - 50 |
| ALKANES C14-16, CHLORO | | 1372804-76-6 | 10 - 20 |
| MONOETHANOLAMINE | | 141-43-5 | 3 - 5 |
| ALCOHOLS, C12-14, ETHOXYLATED PROPOXYLATED | | 68439-51-0 | 1 - 3 |
| HEXAHYDRO-1,3,5-TRIS (2-HYDROXYETHYL)-S- TRIAZINE | | 4719-04-4 | 1 - 3 |
| TRIETHANOLAMINE | | 102-71-6 | 1 - 3 |
| Other components below reportable levels | | | 20 - 30 |

The exact percentages of hazardous ingredients have been withheld as a trade secret.

4. First-aid measures

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|---|---|
| Inhalation | Move to fresh air. Call a physician if symptoms develop or persist. Under normal conditions of intended use, this material is not expected to be an inhalation hazard. |
| Skin contact | Rinse skin with water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. |
| Eye contact | Rinse with water. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists. |
| Ingestion | Rinse mouth thoroughly. Do not give liquids. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell. |
| Most important symptoms/effects, acute and delayed | Direct contact with eyes may cause temporary irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause an allergic skin reaction. |
| Indication of immediate medical attention and special treatment needed | Provide general supportive measures and treat symptomatically. Symptoms may be delayed. |
| General information | If exposed or concerned: Get medical advice/attention. Show this safety data sheet to the doctor in attendance. |

5. Fire-fighting measures

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| Suitable extinguishing media | Foam. Dry chemical powder. Carbon dioxide (CO ₂). Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Unsuitable extinguishing media | Do not use water jet as an extinguisher, as this will spread the fire. |
| Specific hazards arising from the chemical | During fire, gases hazardous to health may be formed. |
| Special protective equipment and precautions for firefighters | Wear suitable protective equipment. |
| Fire fighting equipment/instructions | Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. |
| Specific methods | Use standard firefighting procedures and consider the hazards of other involved materials. In the event of fire and/or explosion do not breathe fumes. |
| General fire hazards | No unusual fire or explosion hazards noted. |

6. Accidental release measures

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| Personal precautions, protective equipment and emergency procedures | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS. |
|--|---|

Methods and materials for containment and cleaning up

Local authorities should be advised if significant spillages cannot be contained. This product is miscible in water. Prevent entry into waterways, sewer, basements or confined areas. Clean up in accordance with all applicable regulations.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions

Contact local authorities in case of spillage to drain/aquatic environment. Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination.

7. Handling and storage

Precautions for safe handling

Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Do not get in eyes, on skin, or on clothing. Avoid breathing mist or vapor. Avoid prolonged exposure. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Store in a well-ventilated place. Do not allow material to freeze. Store away from incompatible materials (see Section 10 of the SDS). If frozen, product may separate. Thaw completely at room temperature and stir thoroughly prior to use.

8. Exposure controls/personal protection

Occupational exposure limits

U.S. - OSHA

| | Type | Value |
|---|------|---------|
| SEVERELY-HYDROTREATED NAPHTHENIC PETROLEUM DISTILLATES (CAS 64742-52-5) | PEL | 5 mg/m3 |

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

| | Type | Value |
|---------------------------------|------|------------------|
| MONOETHANOLAMINE (CAS 141-43-5) | PEL | 6 mg/m3 3 ppm |

US. NIOSH: Pocket Guide to Chemical Hazards

| | Type | Value |
|---------------------------------|------|---------------------------|
| MONOETHANOLAMINE (CAS 141-43-5) | STEL | 15 mg/m3 |
| | TWA | 6 ppm 8 mg/m3 3 ppm |

ACGIH

| | Type | Value |
|---|------|---------|
| SEVERELY-HYDROTREATED NAPHTHENIC PETROLEUM DISTILLATES (CAS 64742-52-5) | TWA | 5 mg/m3 |

US. ACGIH Threshold Limit Values

| | Type | Value |
|---------------------------------|------|---------|
| MONOETHANOLAMINE (CAS 141-43-5) | STEL | 6 ppm |
| | TWA | 3 ppm |
| TRIETHANOLAMINE (CAS 102-71-6) | TWA | 5 mg/m3 |

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|--|--|
| Appropriate engineering controls | Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash fountain and emergency showers are recommended. |
| Individual protection measures, such as personal protective equipment | |
| Eye/face protection | Wear safety glasses with side shields (or goggles). Do not get in eyes. Eye wash fountain is recommended. |
| Skin protection | |
| Hand protection | Use protective gloves made of: Nitrile. |
| Other | Wear appropriate chemical resistant clothing. |
| Respiratory protection | In case of insufficient ventilation, wear suitable respiratory equipment. |
| Thermal hazards | Wear appropriate thermal protective clothing, when necessary. |
| General hygiene considerations | When using, do not eat, drink or smoke. Do not get in eyes, on skin, on clothing. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. |

9. Physical and chemical properties

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|---|--------------------------------------|
| Appearance | CLEAR |
| Physical state | Liquid. |
| Form | Liquid. |
| Color | Not available. |
| Odor | Chemical |
| Odor threshold | Not available. |
| pH | Not Applicable |
| Melting point/freezing point | Not available. |
| Initial boiling point and boiling range | Not Applicable |
| Flash point | 385 °F (196.1 °C) Cleveland Open Cup |
| Evaporation rate | Like water when diluted |
| Flammability (solid, gas) | Not applicable. |
| Upper/lower flammability or explosive limits | |
| Flammability limit - lower (%) | Not available. |
| Flammability limit - upper (%) | Not available. |
| Explosive limit - lower (%) | Not available. |
| Explosive limit - upper (%) | Not available. |
| Vapor pressure | Not available. |
| Vapor density | Not available. |
| Relative density | Not available. |
| Solubility(ies) | 100 % Miscible |
| Partition coefficient (n-octanol/water) | Not available. |
| Auto-ignition temperature | Not available. |
| Decomposition temperature | Not available. |
| Viscosity | Not available. |
| Other information | |
| Explosive properties | Not explosive. |
| Flash point class | Combustible IIIB |
| Oxidizing properties | Not oxidizing. |
| pH in aqueous solution | 8.6 @ 5% |
| Specific gravity | 1.020 |

10. Stability and reactivity

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|---|--|
| Reactivity | The product is stable and non-reactive under normal conditions of use, storage and transport. |
| Chemical stability | Material is stable under normal conditions. |
| Possibility of hazardous reactions | Hazardous polymerization does not occur. |
| Conditions to avoid | Heat, flames and sparks. Avoid temperatures exceeding the flash point. Contact with incompatible materials. |
| Incompatible materials | Acids. Oxidizing agents. Do not add sodium nitrite or other nitrosating agents which may form cancer causing nitrosamines. |
| Hazardous decomposition products | Smoke, fumes, oxides of nitrogen, hydrogen chloride, and oxides of carbon |

11. Toxicological information**Information on likely routes of exposure**

| | |
|---------------------|--|
| Inhalation | Not classified. |
| Skin contact | Causes skin irritation. May cause an allergic skin reaction. |
| Eye contact | Causes eye irritation. |
| Ingestion | Not classified. |

Symptoms related to the physical, chemical and toxicological characteristics Direct contact with eyes may cause temporary irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation.

Information on toxicological effects**Acute toxicity**

| Components | Species | Test Results |
|---|----------------|------------------------|
| ALCOHOLS, C12-14, ETHOXYLATED PROPOXYLATED (CAS 68439-51-0) | | |
| Acute | | |
| Dermal | | |
| <i>Liquid</i> | | |
| LD50 | Rabbit | > 2000 mg/kg ATE |
| Oral | | |
| <i>Liquid</i> | | |
| LD50 | Rat | > 2000 mg/kg |
| ALKANES C14-16, CHLORO (CAS 1372804-76-6) | | |
| Acute | | |
| Dermal | | |
| <i>Liquid</i> | | |
| LD50 | Rabbit | > 2000 mg/kg |
| Oral | | |
| <i>Liquid</i> | | |
| LD50 | Rat | > 5000 mg/kg |
| MONOETHANOLAMINE (CAS 141-43-5) | | |
| Acute | | |
| Dermal | | |
| LD50 | Rabbit | 1025 mg/kg |
| SEVERELY-HYDROTREATED NAPHTHENIC PETROLEUM DISTILLATES (CAS 64742-52-5) | | |
| Acute | | |
| Inhalation | | |
| <i>Mist</i> | | |
| LC50 | Rat | 2.18 - 5.53 mg/l, 4 hr |

| Components | Species | Test Results |
|--|---|--------------|
| TRIETHANOLAMINE (CAS 102-71-6) | | |
| Acute | | |
| Dermal | | |
| LD50 | Rabbit | > 2000 mg/kg |
| Oral | | |
| <i>Liquid</i> | | |
| LD50 | Rat | 4190 mg/kg |
| * Estimates for product may be based on additional component data not shown. | | |
| Skin corrosion/irritation | Causes skin irritation. | |
| Serious eye damage/eye irritation | Causes eye irritation. | |
| Respiratory or skin sensitization | | |
| Respiratory sensitization | Not a respiratory sensitizer. | |
| Skin sensitization | May cause an allergic skin reaction. | |
| Germ cell mutagenicity | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. | |
| Carcinogenicity | This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. | |
| IARC Monographs. Overall Evaluation of Carcinogenicity | | |
| TRIETHANOLAMINE (CAS 102-71-6) | 3 Not classifiable as to carcinogenicity to humans. | |
| OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) | | |
| Not regulated. | | |
| US. National Toxicology Program (NTP) Report on Carcinogens | | |
| Not listed. | | |
| Reproductive toxicity | This product is not expected to cause reproductive or developmental effects. | |
| Specific target organ toxicity - single exposure | Not classified. | |
| Specific target organ toxicity - repeated exposure | Not classified. | |
| Aspiration hazard | Not an aspiration hazard. | |
| Chronic effects | Not classified. | |
| Further information | The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available. | |

12. Ecological information

Ecotoxicity Contains a substance which causes risk of hazardous effects to the environment.

| Components | Species | Test Results | |
|---|----------|--|--------------------------|
| ALCOHOLS, C12-14, ETHOXYLATED PROPOXYLATED (CAS 68439-51-0) | | | |
| <i>Acute</i> | | | |
| EC50 | Bacteria | > 1000 mg/l | |
| Aquatic | | | |
| <i>Acute</i> | | | |
| Crustacea | EC50 | Daphnia | 0.5 mg/l, 48 hours ATE |
| Fish | LC50 | Ide, silver or golden orfe (Leuciscus idus) | 1 - 10 mg/l, 96 hours |
| ALKANES C14-16, CHLORO (CAS 1372804-76-6) | | | |
| Aquatic | | | |
| <i>Acute</i> | | | |
| Fish | LC50 | Bluegill (Lepomis macrochirus) | > 0.1 mg/l, 96 hours |
| MONOETHANOLAMINE (CAS 141-43-5) | | | |
| Aquatic | | | |
| Fish | LC50 | Rainbow trout, donaldson trout (Oncorhynchus mykiss) | 114 - 196 mg/l, 96 hours |

| Components | Species | Test Results |
|--------------------------------|---|------------------------------|
| <i>Acute</i> Crustacea | EC50 Daphnia | 65 mg/l, 48 hours ECHA |
| TRIETHANOLAMINE (CAS 102-71-6) | | |
| Aquatic Crustacea | EC50 Water flea (Ceriodaphnia dubia) | 565.2 - 658.3 mg/l, 48 hours |
| <i>Acute</i> Fish | LC50 Bluegill (Lepomis macrochirus) | 450 - 1000 mg/l, 96 hours |

* Estimates for product may be based on additional component data not shown.

Persistence and degradability

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

| | |
|--|-------|
| ALCOHOLS, C12-14, ETHOXYLATED PROPOXYLATED | 1 - 4 |
| MONOETHANOLAMINE | -1.31 |
| TRIETHANOLAMINE | -2.3 |

Mobility in soil This product is miscible in water.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

| | |
|-------------------------------------|---|
| UN number | UN3082 |
| UN proper shipping name | Environmentally hazardous substances, liquid, n.o.s. (ALKANES C14-16, CHLORO, ALCOHOLS, C12-14, ETHOXYLATED PROPOXYLATED), MARINE POLLUTANT |
| Transport hazard class(es) | |
| Class | 9 |
| Subsidiary risk | - |
| Label(s) | 9 |
| Packing group | III |
| Environmental hazards | |
| Marine pollutant | Yes |
| Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. |
| Special provisions | 8, 146, 335, IB3, T4, TP1, TP29 |
| Packaging exceptions | 155 |
| Packaging non bulk | 203 |
| Packaging bulk | 241 |

Supplemental Information: 49CFR 171.4 excludes "non-bulk"packages (119 gallons or less) from Marine Pollutant Requirements unless all or part of the shipment is by vessel.

IATA

| | |
|-----------------------------------|--|
| UN number | UN3082 |
| UN proper shipping name | Environmentally hazardous substance, liquid, n.o.s. (ALKANES C14-16, CHLORO, ALCOHOLS, C12-14, ETHOXYLATED PROPOXYLATED) |
| Transport hazard class(es) | |
| Class | 9 |
| Subsidiary risk | - |

Packing group III
Environmental hazards Yes
ERG Code 9L
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
Other information

Passenger and cargo aircraft Allowed with restrictions.

Cargo aircraft only Allowed with restrictions.

IMDG

UN number UN3082
UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ALKANES C14-16, CHLORO, ALCOHOLS, C12-14, ETHOXYLATED PROPOXYLATED), MARINE POLLUTANT

Transport hazard class(es)

Class 9

Subsidiary risk -

Packing group III

Environmental hazards

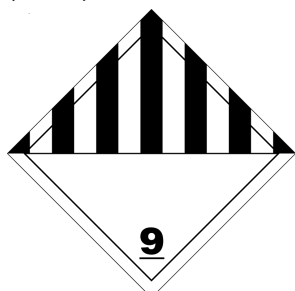
Marine pollutant Yes

EmS F-A, S-F

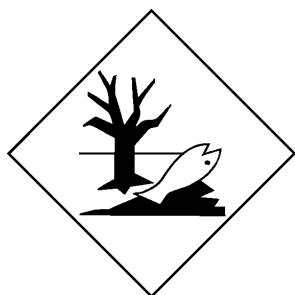
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

DOT; IATA; IMDG



Marine pollutant



General information IMDG Regulated Marine Pollutant. DOT Regulated Marine Pollutant.

15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. It may be reportable under the provisions of SARA Sections 311 and 312 if specific threshold criteria are met or exceeded.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

HEXAHYDRO-1,3,5-TRIS (2-HYDROXYETHYL)-S-TRIAZINE (CAS 4719-04-4)

1.0 % One-Time Export Notification only.

TSCA Chemical Action Plans, Chemicals of Concern

ALKANES C14-16, CHLORO (CAS 1372804-76-6)

Short-Chain Chlorinated Paraffins (SCCPs) and Other Chlorinated Paraffins Action Plan

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

| | |
|-----------------------------|--|
| Revision date | 12-18-2017 |
| Version # | 06 |
| Further information | Not available. |
| NFPA ratings | Health: 1 Flammability: 1 Instability: 0 |
| Disclaimer | The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. |
| Revision information | Physical & Chemical Properties: Multiple Properties |