

| | |
|---------------------------------|---|
| Other hazards | None known. |
| Supplemental information | The classified hazards shown on this SDS are associated with the product concentrate. These hazards are not expected under recommended use conditions and dilution. |

3. Composition/information on ingredients

Mixtures

| Chemical name | Common name and synonyms | CAS number | % |
|--|--------------------------|------------|---------|
| SEVERELY-HYDROTREATED NAPHTHENIC DISTILLATES | | 64742-52-5 | 30 - 60 |
| ALKANES C14-16, CHLORO | | 63449-39-8 | 10 - 30 |
| ALKOXYLATED LINEAR ALCOHOLS | | 68987-81-5 | 1 - 5 |
| MONOETHANOLAMINE | | 141-43-5 | 1 - 5 |
| TRIAZINETRIETHANOL | | 4719-04-4 | 1 - 5 |
| TRIETHANOLAMINE | | 102-71-6 | 1 - 5 |
| Other components below reportable levels | | | 10 - 30 |

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

| | |
|---|---|
| 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. |
| 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

| | |
|--|---|
| Suitable extinguishing media | Foam. Dry chemicals. 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 | Cool containers exposed to heat with water spray and remove container, if no risk is involved. |
| 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

| | |
|--|--|
| 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/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 prolonged or repeated contact with skin. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

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

8. Exposure controls/personal protection

Occupational exposure limits

ACGIH

| | Type | Value |
|---|------|---------|
| SEVERELY-HYDROTREATED NAPHTHENIC 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 |

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

| | Type | Value |
|---------------------------------|------|-----------------------------|
| MONOETHANOLAMINE (CAS 141-43-5) | STEL | 15 mg/m3 |
| | TWA | 6 ppm 7.5 mg/m3 3 ppm |
| TRIETHANOLAMINE (CAS 102-71-6) | TWA | 5 mg/m3 |

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

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

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

| | Type | Value |
|---------------------------------|------|-------|
| MONOETHANOLAMINE (CAS 141-43-5) | STEL | 6 ppm |
| | TWA | 3 ppm |

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

| | Type | Value |
|--------------------------------|------|---------------------|
| TRIETHANOLAMINE (CAS 102-71-6) | TWA | 5 mg/m ³ |

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

| | Type | Value |
|---------------------------------|------|-----------------------|
| MONOETHANOLAMINE (CAS 141-43-5) | STEL | 6 ppm |
| | TWA | 3 ppm |
| TRIETHANOLAMINE (CAS 102-71-6) | TWA | 3.1 mg/m ³ |
| | | 0.5 ppm |

Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety)

| | Type | Value |
|---------------------------------|------|-----------------------|
| MONOETHANOLAMINE (CAS 141-43-5) | STEL | 15 mg/m ³ |
| | | 6 ppm |
| | TWA | 7.5 mg/m ³ |
| | | 3 ppm |
| TRIETHANOLAMINE (CAS 102-71-6) | TWA | 5 mg/m ³ |

Biological limit values

No biological exposure limits noted for the ingredient(s).

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**

Nitrile gloves are recommended.

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**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

360 °F (182.2 °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)

Solubility (water) 100 % Water 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 8.8 @ 5%

Specific gravity 1.006

VOC ASTM D2369 10 %

10. Stability and reactivity

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 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Contact with incompatible materials.

Incompatible materials Do not add sodium nitrite or other nitrosating agents which may form cancer causing nitrosamines. Acids. Oxidizing agents.

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 Not classified.

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.

Information on toxicological effects**Acute toxicity**

| Components | Species | Test Results |
|---|------------------------|-----------------------|
| ALKANES C14-16, CHLORO (CAS 63449-39-8) | | |
| Acute | | |
| Dermal | | |
| <i>Liquid</i> | | |
| LD50 | Rabbit | > 2000 mg/kg |
| Oral | | |
| <i>Liquid</i> | | |
| LD50 | Rat | > 5000 mg/kg |
| ALKOXYLATED LINEAR ALCOHOLS (CAS 68987-81-5) | | |
| Acute | | |
| Dermal | | |
| <i>Liquid</i> | | |
| LD50 | Rabbit | > 2000 mg/kg ATE |
| Oral | | |
| <i>Liquid</i> | | |
| LD50 | Rat | 2380 - 2745 mg/kg ATE |
| SEVERELY-HYDROTREATED NAPHTHENIC DISTILLATES (CAS 64742-52-5) | | |
| Acute | | |
| Dermal | | |
| <i>Liquid</i> | | |
| LD50 | Rabbit | > 5000 mg/kg |
| Inhalation | | |
| <i>Mist</i> | | |
| LC50 | Rat | > 5 mg/l, 4 hours |
| Oral | | |
| <i>Liquid</i> | | |
| LD50 | Rat | > 5000 mg/kg |
| TRIAZINETRIETHANOL (CAS 4719-04-4) | | |
| Acute | | |
| Dermal | | |
| <i>Liquid</i> | | |
| LD50 | Rat | 4000 mg/kg |
| Oral | | |
| <i>Liquid</i> | | |
| LD50 | Rat | 1000 mg/kg |
| TRIETHANOLAMINE (CAS 102-71-6) | | |
| Acute | | |
| Dermal | | |
| <i>Liquid</i> | | |
| LD50 | Rabbit | > 2000 mg/kg |
| Oral | | |
| <i>Liquid</i> | | |
| LD50 | Rat | 4190 mg/kg |
| Skin corrosion/irritation | Not classified. | |
| Serious eye damage/eye irritation | Causes eye irritation. | |
| Respiratory or skin sensitization | | |
| Canada - Alberta OELs: Irritant | | |
| MONOETHANOLAMINE (CAS 141-43-5) | Irritant | |
| TRIETHANOLAMINE (CAS 102-71-6) | Irritant | |
| Canada - Quebec OELs: Sensitizer | | |
| TRIETHANOLAMINE (CAS 102-71-6) | Sensitizer. | |

| | |
|----------------------------------|---|
| Respiratory sensitization | Not a respiratory sensitizer. |
| Skin sensitization | This product is not expected to cause skin sensitization. |
| 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. Oil /Distillate meets the EU requirement of less than 3% (w/w) DMSO extract for total polycyclic aromatic compound (PAC) using IP 346. |

IARC Monographs. Overall Evaluation of Carcinogenicity

TRIETHANOLAMINE (CAS 102-71-6) 3 Not classifiable as to carcinogenicity to humans.

| | |
|---|---|
| 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 |
|--|---------|---|
| ALKANES C14-16, CHLORO (CAS 63449-39-8) | | |
| Aquatic | | |
| <i>Acute</i> | | |
| Fish | LC50 | Bluegill (Lepomis macrochirus) |
| | | > 0.1 mg/l, 96 hours |
| ALKOXYLATED LINEAR ALCOHOLS (CAS 68987-81-5) | | |
| Aquatic | | |
| <i>Acute</i> | | |
| Crustacea | EC50 | Daphnia |
| | | 1 - 10 mg/l, 48 hours |
| Fish | LC50 | Pimephales promelas |
| | | 1 - 10 mg/l, 96 hours |
| MONOETHANOLAMINE (CAS 141-43-5) | | |
| Aquatic | | |
| Fish | LC50 | Rainbow trout,donaldson trout (Oncorhynchus mykiss) |
| | | 114 - 196 mg/l, 96 hours |
| <i>Acute</i> | | |
| Crustacea | EC50 | Daphnia |
| | | 65 mg/l, 48 hours ECHA |
| TRIAZINETRIETHANOL (CAS 4719-04-4) | | |
| Aquatic | | |
| <i>Acute</i> | | |
| Crustacea | EC50 | Daphnia |
| | | 11.9 mg/l, 48 hours ECHA |
| Fish | LC50 | Fish |
| | | 16 - 240 mg/l, 96 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 |

Persistence and degradability No data is available on the degradability of any ingredients in the mixture.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

| | |
|-----------------------------|-------|
| ALKOXYLATED LINEAR ALCOHOLS | 3.01 |
| MONOETHANOLAMINE | -1.31 |

Partition coefficient n-octanol / water (log Kow)

| | |
|--------------------|------|
| TRIAZINETRIETHANOL | -2 |
| TRIETHANOLAMINE | -2.3 |

Bioconcentration factor (BCF)

| | |
|------------------|------------------|
| MONOETHANOLAMINE | < 3.2, ESTIMATED |
|------------------|------------------|

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**TDG**

| | |
|-------------------------------------|--|
| UN number | UN3082 |
| UN proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ALKANES C14-16, CHLORO), MARINE POLLUTANT |
| Transport hazard class(es) | |
| Class | 9 |
| Subsidiary risk | - |
| Packing group | III |
| Environmental hazards | Yes |
| Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. |

IATA

| | |
|-------------------------------------|--|
| UN number | UN3082 |
| UN proper shipping name | Environmentally hazardous substance, liquid, n.o.s. (ALKANES C14-16, CHLORO) |
| 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. |
|----------------------------|----------------------------|

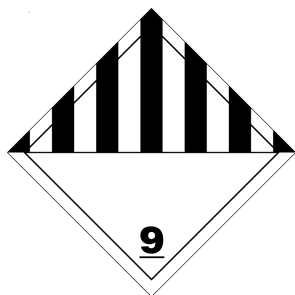
IMDG

| | |
|-------------------------------------|--|
| UN number | UN3082 |
| UN proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ALKANES C14-16, CHLORO), 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. |

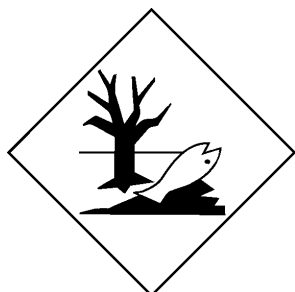
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not established.

IATA; IMDG; TDG



Marine pollutant



General information

IMDG Regulated Marine Pollutant.

15. Regulatory information

Canadian regulations

This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

Controlled Drugs and Substances Act

Not regulated.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Not regulated.

International regulations

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto protocol

Not applicable.

Montreal Protocol

Not applicable.

Basel Convention

Not applicable.

International Inventories

| Country(s) or region | Inventory name | On inventory or exempt (yes/no)* |
|----------------------|--|----------------------------------|
| Australia | Australian Inventory of Chemical Substances (AICS) | Yes |
| Canada | Domestic Substances List (DSL) | No |
| Canada | Non-Domestic Substances List (NDSL) | Yes |
| China | Inventory of Existing Chemical Substances in China (IECSC) | Yes |

| Country(s) or region | Inventory name | On inventory or exempt (yes/no)* |
|-----------------------------|--|----------------------------------|
| Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | No |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | No |
| Korea | Existing Chemicals List (ECL) | No |
| New Zealand | New Zealand Inventory | No |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | No |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other information

Issue date 10-26-2017

Revision date 08-21-2018

Version # 02

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
 This document has undergone significant changes and should be reviewed in its entirety.