

1. Identification

| | |
|---|---|
| Product identifier | Gas Leak Detector (4180-53, 4832-C9) |
| Other means of identification | Not available. |
| Recommended use | Gas Leak Detector |
| Recommended restrictions | None known. |
| Manufacturer/Importer/Supplier/Distributor information | |
| Manufacturer | |
| Company name | Nu-Calgon |
| Address | 2611 Schuetz Road St. Louis, MO 63043 United States |
| Telephone | 314-469-7000 / 800-554-5499 |
| E-mail | Not available. |
| Emergency phone number | 1-800-424-9300 (CHEMTREC) |
| Supplier | See above. |

2. Hazard identification

| | | |
|-----------------------------------|-----------------------------------|-------------|
| Physical hazards | Flammable liquids | Category 3 |
| Health hazards | Serious eye damage/eye irritation | Category 2A |
| | Carcinogenicity | Category 2 |
| Environmental hazards | Not classified. | |
| WHMIS 2015 defined hazards | Not classified | |
| Label elements | | |



Signal word Warning

Hazard statement Flammable liquid and vapour. Causes serious eye irritation. Suspected of causing cancer.

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical, ventilating and lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Wash thoroughly after handling. Wear protective gloves, protective clothing, eye protection and face protection.

Response IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention. IF exposed or concerned: Get medical attention. In case of fire: Use appropriate media to extinguish.

Storage Store in a well-ventilated place. Keep cool. Store locked up.

Disposal Dispose of container in accordance with local, regional, national and international regulations.

WHMIS 2015: Health Hazard(s) not otherwise classified (HHNOC) None known

WHMIS 2015: Physical Hazard(s) not otherwise classified (PHNOC) None known

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information None.

3. Composition/Information on ingredients

Mixture

| Chemical name | Common name and synonyms | CAS number | % |
|--|--------------------------|------------|---------|
| Glycerol | | 56-81-5 | 15 - 40 |
| Polyethylene glycol | | 25322-68-3 | 10 - 30 |
| Isopropanol | | 67-63-0 | 1 - 5 |
| Amides, coco, N,N-bis(hydroxyethyl) | | 68603-42-9 | 0.1 - 1 |
| Diethanolamine | | 111-42-2 | 0.1 - 1 |

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

Composition comments

CANADA GHS: The exact percentage (concentration) of composition has been withheld as a trade secret. US GHS: The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

4. First-aid measures

| | |
|---|--|
| Inhalation | If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist. |
| Skin contact | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash clothing before reuse. Get medical attention if irritation develops and persists. |
| Eye contact | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention. |
| Ingestion | If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth if victim is unconscious or is convulsing. Get medical attention if you feel unwell. |
| Most important symptoms/effects, acute and delayed | May cause respiratory irritation. May cause skin irritation. Prolonged or repeated contact may dry skin and cause irritation. Causes serious eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May be harmful if swallowed. Symptoms may include stomach distress, nausea or vomiting. Suspected of causing cancer. |
| Indication of immediate medical attention and special treatment needed | Treat symptomatically. Symptoms may be delayed. |
| General information | IF exposed or concerned: Get medical attention. |

5. Fire-fighting measures

| | |
|--|--|
| Suitable extinguishing media | Water fog. Alcohol resistant foam. Dry chemical powder. Carbon dioxide (CO ₂). |
| Unsuitable extinguishing media | Do not use water jet as an extinguisher, as this will spread the fire. |
| Specific hazards arising from the chemical | Vapours may form explosive mixtures with air. Vapours may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed. |
| Special protective equipment and precautions for firefighters | Self-contained breathing apparatus and full protective clothing must be worn in case of fire. |
| Fire-fighting equipment/instructions | In case of fire and/or explosion do not breathe fumes. 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. |
| General fire hazards | Flammable liquid and vapour. |
| Hazardous combustion products | May include and are not limited to: Oxides of carbon. |

6. Accidental release measures

| | |
|--|---|
| Personal precautions, protective equipment and emergency procedures | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. 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

Use water spray to reduce vapours or divert vapour cloud drift. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil etc) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools. Ventilate the contaminated area.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. 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. Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid contact with eyes and skin. Avoid breathing mists or vapours. Do not swallow. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground and bond container and receiving equipment. Use non-sparking tools and explosion-proof equipment. Take precautionary measures against static discharges. Handle and open container with care. When using, do not eat, drink or smoke. Take off contaminated clothing and wash before reuse. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Keep out of the reach of children. Keep tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS). Store locked up.

8. Exposure controls/Personal protection

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

| Components | Type | Value | Form |
|-------------------------------|------|-----------------------|-------|
| Diethanolamine (CAS 111-42-2) | TWA | 2 mg/m ³ | |
| Glycerol (CAS 56-81-5) | TWA | 10 mg/m ³ | Mist. |
| Isopropanol (CAS 67-63-0) | STEL | 984 mg/m ³ | |
| | | 400 ppm | |
| | TWA | 492 mg/m ³ | |
| | | 200 ppm | |

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

| Components | Type | Value | Form |
|-------------------------------|------|----------------------|------------------|
| Diethanolamine (CAS 111-42-2) | TWA | 2 mg/m ³ | |
| Glycerol (CAS 56-81-5) | TWA | 3 mg/m ³ | Respirable mist. |
| | | 10 mg/m ³ | Mist. |
| Isopropanol (CAS 67-63-0) | STEL | 400 ppm | |
| | TWA | 200 ppm | |

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

| Components | Type | Value | Form |
|-------------------------------|------|---------------------|-------------------------------|
| Diethanolamine (CAS 111-42-2) | TWA | 1 mg/m ³ | Inhalable fraction and vapor. |
| Isopropanol (CAS 67-63-0) | STEL | 400 ppm | |
| | TWA | 200 ppm | |

Canada. New Brunswick OELs: Threshold Limit Values (TLVs) Based on the 1991 and 1997 ACGIH TLVs and BEIs Publication (New Brunswick Regulation 91-191), as amended

| Components | Type | Value | Form |
|-------------------------------|------|----------------------|-------|
| Diethanolamine (CAS 111-42-2) | TWA | 2 mg/m ³ | |
| | | 0.46 ppm | |
| Glycerol (CAS 56-81-5) | TWA | 10 mg/m ³ | Mist. |

Canada. New Brunswick OELs: Threshold Limit Values (TLVs) Based on the 1991 and 1997 ACGIH TLVs and BEIs Publication (New Brunswick Regulation 91-191), as amended

| Components | Type | Value | Form |
|---------------------------|------|-----------------------------------|------|
| Isopropanol (CAS 67-63-0) | STEL | 1230 mg/m ³ 500 ppm | |
| | TWA | 983 mg/m ³ 400 ppm | |

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

| Components | Type | Value | Form |
|-------------------------------|------|---------------------|-------------------------------|
| Diethanolamine (CAS 111-42-2) | TWA | 1 mg/m ³ | Inhalable fraction and vapor. |
| Isopropanol (CAS 67-63-0) | STEL | 400 ppm | |
| | TWA | 200 ppm | |

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

| Components | Type | Value | Form |
|-------------------------------|------|-----------------------------------|-------------------------------|
| Diethanolamine (CAS 111-42-2) | TWA | 1 mg/m ³ | Inhalable fraction and vapor. |
| Glycerol (CAS 56-81-5) | TWA | 10 mg/m ³ | Mist. |
| Isopropanol (CAS 67-63-0) | STEL | 1230 mg/m ³ 500 ppm | |
| | TWA | 985 mg/m ³ 400 ppm | |

Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21)

| Components | Type | Value | Form |
|-------------------------------|-----------|----------------------|-------|
| Diethanolamine (CAS 111-42-2) | 15 minute | 4 mg/m ³ | |
| | 8 hour | 2 mg/m ³ | |
| Glycerol (CAS 56-81-5) | 15 minute | 20 mg/m ³ | Mist. |
| | 8 hour | 10 mg/m ³ | Mist. |
| Isopropanol (CAS 67-63-0) | 15 minute | 400 ppm | |
| | 8 hour | 200 ppm | |

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

| Components | Type | Value | Form |
|---------------------------|------|-----------------------|----------------------|
| Glycerol (CAS 56-81-5) | PEL | 5 mg/m ³ | Respirable fraction. |
| | | 15 mg/m ³ | Total dust. |
| Isopropanol (CAS 67-63-0) | PEL | 980 mg/m ³ | |
| | | 400 ppm | |

US. OSHA Table Z-3 (29 CFR 1910.1000)

| Components | Type | Value | Form |
|------------------------|------|----------------------|----------------------|
| Glycerol (CAS 56-81-5) | TWA | 5 mg/m ³ | Respirable fraction. |
| | | 15 mg/m ³ | Total dust. |
| | | 50 Mppcf | Total dust. |
| | | 15 Mppcf | Respirable fraction. |

US. ACGIH Threshold Limit Values

| Components | Type | Value | Form |
|-------------------------------|------|---------------------|-------------------------------|
| Diethanolamine (CAS 111-42-2) | TWA | 1 mg/m ³ | Inhalable fraction and vapor. |
| Isopropanol (CAS 67-63-0) | STEL | 400 ppm | |
| | TWA | 200 ppm | |

US. NIOSH: Pocket Guide to Chemical Hazards

| Components | Type | Value |
|-------------------------------|------|-----------------------------------|
| Diethanolamine (CAS 111-42-2) | TWA | 15 mg/m ³ |
| | | 3 ppm |
| Isopropanol (CAS 67-63-0) | STEL | 1225 mg/m ³ 500 ppm |

US. NIOSH: Pocket Guide to Chemical Hazards

| Components | Type | Value |
|------------|------|----------------------|
| | TWA | 980 mg/m3 400 ppm |

US. Workplace Environmental Exposure Level (WEEL) Guides

| Components | Type | Value |
|--------------------------------------|------|----------|
| Polyethylene glycol (CAS 25322-68-3) | TWA | 10 mg/m3 |

Biological limit values**ACGIH Biological Exposure Indices**

| Components | Value | Determinant | Specimen | Sampling Time |
|---------------------------|---------|-------------|----------|---------------|
| Isopropanol (CAS 67-63-0) | 40 mg/L | Acetone | Urine | * |

* - For sampling details, please see the source document.

Exposure guidelines**Canada - Alberta OELs: Skin designation**

Diethanolamine (CAS 111-42-2)

Can be absorbed through the skin.

Canada - British Columbia OELs: Skin designation

Diethanolamine (CAS 111-42-2)

Can be absorbed through the skin.

Canada - Manitoba OELs: Skin designation

Diethanolamine (CAS 111-42-2)

Danger of cutaneous absorption

Canada - Ontario OELs: Skin designation

Diethanolamine (CAS 111-42-2)

Can be absorbed through the skin.

Canada - Quebec OELs: Skin designation

Diethanolamine (CAS 111-42-2)

Can be absorbed through the skin.

Canada - Saskatchewan OELs: Skin designation

Diethanolamine (CAS 111-42-2)

Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

Diethanolamine (CAS 111-42-2)

Danger of cutaneous absorption

Appropriate engineering controls

Explosion-proof general and local exhaust ventilation. 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. Provide eyewash station.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Wear chemical goggles.

Skin protection**Hand protection**

Wear appropriate chemical resistant gloves.

Other

Wear suitable protective clothing.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. Respirator should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134), CAN/CSA-Z94.4 and ANSI's standard for respiratory protection (Z88.2).

Thermal hazards

Not available.

General hygiene considerations

When using do not smoke. 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****Physical state**

Liquid.

Form

Liquid.

Colour

Not available.

Odour

Not available.

Odour threshold

Not available.

pH

Not available.

Melting point/freezing point

Not available.

Initial boiling point and boiling range

Not available.

| | |
|---|-----------------|
| Pour point | Not available. |
| Specific gravity | Not available. |
| Partition coefficient (n-octanol/water) | Not available. |
| Flash point | Not available. |
| Evaporation rate | Not available. |
| 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. |
| Vapour pressure | Not available. |
| Vapour density | Not available. |
| Relative density | Not available. |
| Solubility(ies) | Not available. |
| Auto-ignition temperature | Not available. |
| Decomposition temperature | Not available. |
| Viscosity | Not available. |
| Other information | |
| Explosive properties | Not explosive. |
| Oxidising properties | Not oxidising. |

10. Stability and reactivity

| | |
|---|---|
| Reactivity | The product is stable and non-reactive under normal conditions of use, storage and transport. |
| Possibility of hazardous reactions | No dangerous reaction known under conditions of normal use. |
| Chemical stability | Material is stable under normal conditions. |
| Conditions to avoid | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. |
| Incompatible materials | Strong oxidising agents. Chlorine. Isocyanates. |
| Hazardous decomposition products | May include and are not limited to: Oxides of carbon. |

11. Toxicological information

| | |
|---|---|
| Routes of exposure | Inhalation. Ingestion. Skin contact. Eye contact. |
| Information on likely routes of exposure | |
| Ingestion | May cause stomach distress, nausea or vomiting. |
| Inhalation | Prolonged inhalation may be harmful. |
| Skin contact | Prolonged or repeated contact may dry skin and cause irritation. |
| Eye contact | Causes serious eye irritation. |
| Symptoms related to the physical, chemical and toxicological characteristics | Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. |

Information on toxicological effects

Acute toxicity Not known.

| Components | Species | Test Results |
|--|---------------|-------------------|
| Amides, coco, N,N-bis(hydroxyethyl) (CAS 68603-42-9) | | |
| Acute | | |
| <i>Dermal</i> | | |
| LD50 | Rabbit | > 2000 mg/kg, EPA |
| <i>Inhalation</i> | | |
| LC50 | Not available | |

| Components | Species | Test Results |
|--|---|--|
| <i>Oral</i> LD50 | Rat | > 5000 mg/kg, HSDB 12200 mg/kg, HSDB |
| Diethanolamine (CAS 111-42-2) | | |
| Acute | | |
| <i>Dermal</i> LD50 | Rabbit | 11.9 ml/kg, HSDB |
| | Rat | 8328 mg/kg, RTECS |
| <i>Inhalation</i> LC50 | Not available | |
| <i>Oral</i> LD50 | Rat | 1100 mg/kg, ECHA |
| Glycerol (CAS 56-81-5) | | |
| Acute | | |
| <i>Dermal</i> LD50 | Guinea pig | 56750 mg/kg, ECHA |
| <i>Inhalation</i> LC50 | Rat | 275000 mg/m ³ , 4 hours, ECHA |
| <i>Oral</i> LD50 | Rat | 11500 mg/kg, ECHA |
| Isopropanol (CAS 67-63-0) | | |
| Acute | | |
| <i>Dermal</i> LD50 | Rabbit | 16.4 ml/kg, 24 Hours, ECHA |
| <i>Inhalation</i> LC50 | Rat | 16970 mg/l/4h, HMIRA |
| <i>Oral</i> LD50 | Rat | 5840 mg/kg, ECHA |
| Polyethylene glycol (CAS 25322-68-3) | | |
| Acute | | |
| <i>Dermal</i> LD50 | Rat | > 2000 mg/kg, ECHA |
| <i>Inhalation</i> LC50 | Not available | |
| <i>Oral</i> LD50 | Rat | 4300 mg/kg, ECHA |
| Skin corrosion/irritation | Prolonged skin contact may cause temporary irritation. | |
| Exposure minutes | Not available. | |
| Erythema value | Not available. | |
| Oedema value | Not available. | |
| Serious eye damage/eye irritation | Causes serious eye irritation. | |
| Corneal opacity value | Not available. | |
| Iris lesion value | Not available. | |
| Conjunctival reddening value | Not available. | |
| Conjunctival oedema value | Not available. | |
| Recover days | Not available. | |
| Respiratory or skin sensitisation | | |
| Canada - Alberta OELs: Irritant | | |
| Glycerol (CAS 56-81-5) | Irritant | |
| Respiratory sensitisation | Not a respiratory sensitizer. | |
| Skin sensitisation | This product is not expected to cause skin sensitisation. | |

| | |
|--|--|
| Mutagenicity | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. |
| Carcinogenicity | Suspected of causing cancer. |
| ACGIH Carcinogens | |
| Diethanolamine (CAS 111-42-2) | A3 Confirmed animal carcinogen with unknown relevance to humans. |
| California Proposition 65 - CRT: Listed date/Carcinogenic substance | |
| Amides, coco, N,N-bis(hydroxyethyl) (CAS 68603-42-9) | |
| Diethanolamine (CAS 111-42-2) | |
| Formaldehyde (CAS 50-00-0) | |
| Canada - Manitoba OELs: carcinogenicity | |
| Diethanolamine (CAS 111-42-2) | Confirmed animal carcinogen with unknown relevance to humans. |
| Canada - Quebec OELs: Carcinogen category | |
| Diethanolamine (CAS 111-42-2) | Detected carcinogenic effect in animals. |
| IARC Monographs. Overall Evaluation of Carcinogenicity | |
| Amides, coco, N,N-bis(hydroxyethyl) (CAS 68603-42-9) | Volume 101 - 2B Possibly carcinogenic to humans. |
| Diethanolamine (CAS 111-42-2) | Volume 77, Volume 101 - 2B Possibly carcinogenic to humans. |
| OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052) | |
| Not listed. | |
| Reproductive toxicity | This product is not expected to cause reproductive or developmental effects. |
| Teratogenicity | Not available. |
| Specific target organ toxicity - single exposure | Not classified. |
| Specific target organ toxicity - repeated exposure | Not classified. |
| Aspiration hazard | Not an aspiration hazard. |
| Chronic effects | Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects. |

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Ecotoxicological data

| Components | | Species | Test Results |
|--------------------------------------|------|---|------------------------------|
| Diethanolamine (CAS 111-42-2) | | | |
| Algae | IC50 | Algae | 7.8 mg/L, 72 Hours |
| Crustacea | EC50 | Daphnia | 55 mg/L, 48 Hours |
| Aquatic | | | |
| Fish | LC50 | Fathead minnow (<i>Pimephales promelas</i>) | 100 mg/L, 96 hours |
| Glycerol (CAS 56-81-5) | | | |
| Aquatic | | | |
| Fish | LC50 | Rainbow trout, donaldson trout (<i>Oncorhynchus mykiss</i>) | 51000 - 57000 mg/L, 96 hours |
| Isopropanol (CAS 67-63-0) | | | |
| Algae | IC50 | Algae | 1000 mg/L, 72 Hours |
| Crustacea | EC50 | Daphnia | 13299 mg/L, 48 Hours |
| Aquatic | | | |
| Fish | LC50 | Bluegill (<i>Lepomis macrochirus</i>) | > 1400 mg/L, 96 hours |
| Polyethylene glycol (CAS 25322-68-3) | | | |
| Aquatic | | | |
| Fish | LC50 | Atlantic salmon (<i>Salmo salar</i>) | > 1000 mg/L, 96 hours |

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

Bioaccumulative potential

Mobility in soil No data available.

Mobility in general Not available.

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

Transport of Dangerous Goods (TDG) Proof of Classification Classification Method: Classified as per Part 2, Sections 2.1 – 2.8 of the Transportation of Dangerous Goods Regulations. If applicable, the technical name and the classification of the product will appear below.

U.S. Department of Transportation (DOT)

Basic shipping requirements:

| | |
|-----------------------------|---|
| UN number | UN1993 |
| Proper shipping name | Flammable liquids, n.o.s., Limited Quantity |
| Technical name | Isopropanol |
| Hazard class | 3 |
| Packing group | III |

Transportation of Dangerous Goods (TDG - Canada)

Basic shipping requirements:

| | |
|-----------------------------|--|
| UN number | UN1993 |
| Proper shipping name | FLAMMABLE LIQUID, N.O.S., Limited Quantity |
| Technical name | Isopropanol |
| Hazard class | 3 |
| Packing group | III |

IATA/ICAO (Air)

Basic shipping requirements:

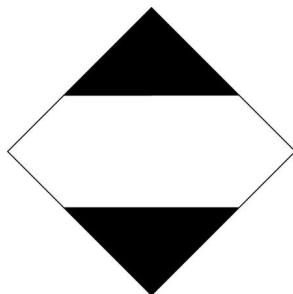
| | |
|-----------------------------|--|
| UN number | UN1993 |
| Proper shipping name | Flammable liquid, n.o.s., Limited Quantity |
| Technical name | Isopropanol |
| Hazard class | 3 |
| Packing group | III |
| ERG Code | 3L |

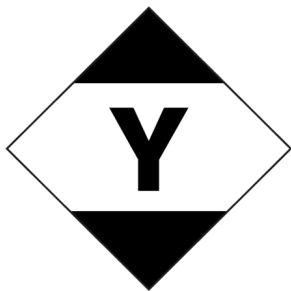
IMDG (Marine Transport)

Basic shipping requirements:

| | |
|-----------------------------|--|
| UN number | UN1993 |
| Proper shipping name | FLAMMABLE LIQUID, N.O.S., Limited Quantity |
| Technical name | Isopropanol |
| Hazard class | 3 |
| Packing group | III |
| EmS | F-E, S-E |

DOT; IMDG; TDG





15. Regulatory information

Canadian federal 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.

Canada NPRI VOCs with Additional Reporting Requirements: Mass reporting threshold/Identification Number

Isopropanol (CAS 67-63-0) 1 TONNES

Canada Priority Substances List (Second List): Listed substance

Glycerol (CAS 56-81-5) Listed.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Not regulated.

WHMIS 2015 Exemptions Not applicable

US Federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

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

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Diethanolamine (CAS 111-42-2) Listed.

Isopropanol (CAS 67-63-0) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance No

Classified hazard categories Flammable (gases, aerosols, liquids, or solids)
Serious eye damage or eye irritation
Carcinogenicity

SARA 313 (TRI reporting)

| Chemical name | CAS number | % by wt. |
|---------------|------------|----------|
| Isopropanol | 67-63-0 | 1 - 5 |

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Diethanolamine (CAS 111-42-2)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

US state regulations

US - California Hazardous Substances (Director's): Listed substance

Diethanolamine (CAS 111-42-2) Listed.

Isopropanol (CAS 67-63-0) Listed.

US - Illinois Chemical Safety Act: Listed substance

Diethanolamine (CAS 111-42-2)

Isopropanol (CAS 67-63-0)

US - Louisiana Spill Reporting: Listed substance

Diethanolamine (CAS 111-42-2) Listed.

Isopropanol (CAS 67-63-0) Listed.

US - Minnesota Haz Subs: Listed substance

Diethanolamine (CAS 111-42-2) Listed.
 Glycerol (CAS 56-81-5) Listed.
 Isopropanol (CAS 67-63-0) Listed.
 Polyethylene glycol (CAS 25322-68-3) Listed.

US - Texas Effects Screening Levels: Listed substance

Amides, coco, N,N-bis(hydroxyethyl) (CAS 68603-42-9) Listed.
 Diethanolamine (CAS 111-42-2) Listed.
 Glycerol (CAS 56-81-5) Listed.
 Isopropanol (CAS 67-63-0) Listed.
 Polyethylene glycol (CAS 25322-68-3) Listed.

US. Massachusetts RTK - Substance List

Diethanolamine (CAS 111-42-2)
 Glycerol (CAS 56-81-5)
 Isopropanol (CAS 67-63-0)

US. New Jersey Worker and Community Right-to-Know Act

Diethanolamine (CAS 111-42-2)
 Glycerol (CAS 56-81-5)
 Isopropanol (CAS 67-63-0)

US. Pennsylvania Worker and Community Right-to-Know Law

Diethanolamine (CAS 111-42-2)
 Glycerol (CAS 56-81-5)
 Isopropanol (CAS 67-63-0)

US. Rhode Island RTK

Diethanolamine (CAS 111-42-2)
 Glycerol (CAS 56-81-5)
 Isopropanol (CAS 67-63-0)

US. California Proposition 65

WARNING: This product can expose you to chemicals including Diethanolamine, which is known to the State of California to cause cancer, and Methanol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

California Proposition 65 - CRT: Listed date/Carcinogenic substance

Amides, coco, N,N-bis(hydroxyethyl) (CAS 68603-42-9) Listed: June 22, 2012
 Diethanolamine (CAS 111-42-2) Listed: June 22, 2012
 Formaldehyde (CAS 50-00-0) Listed: January 1, 1988

California Proposition 65 - CRT: Listed date/Developmental toxin

Methanol (CAS 67-56-1) Listed: March 16, 2012

Inventory status

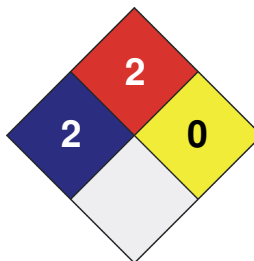
| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-----------------------------|---|------------------------|
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |

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

16. Other information

| LEGEND | |
|----------|---|
| Severe | 4 |
| Serious | 3 |
| Moderate | 2 |
| Slight | 1 |
| Minimal | 0 |

| | |
|---------------------|-----|
| HEALTH | * 2 |
| FLAMMABILITY | 2 |
| PHYSICAL HAZARD | 0 |
| PERSONAL PROTECTION | |

**Disclaimer**

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Further information

01
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Not available.