SAFETY DATA SHEET

1. Identification

| Product identifier | KD243C KNOCK DOWN FAR INSTITUTIONAL INSECT KILI | M, LIVESTOCK, FOOD PROCESSING PLANTS & LER |
|---------------------------------|--|---|
| Other means of identification | | |
| Product code | KD243C | |
| Recommended use | PESTICIDE | |
| Recommended restrictions | None known. | |
| Manufacturer/Importer/Supplier/ | Distributor information | |
| Manufacturer | | |
| Company name | KUUS INC. | |
| Address | 450 TAPSCOTT ROAD | |
| | SCARBOROUGH, ON M1B1Y | [′] 4 |
| | Canada | |
| Telephone | General Assistance | 1-416-298-7724 |
| E-mail | Not available. | |
| Emergency phone number | Canutec | 1-888-226-8832 |
| | | 1-613-996-6666 |

2. Hazard(s) identification

| Physical hazards | Flammable aerosols |
|------------------|--------------------------------------|
| Health hazards | Sensitization, skin |
| Label elements | |
| | |
| Signal word | Danger |
| Hazard statement | Extremely flammable aerosol. May cau |
| | |

| Hazard statement | Extremely flammable aerosol. May cause an allergic skin reaction. | |
|--------------------------|--|--|
| Precautionary statement | | |
| Prevention | Do not spray on an open flame or other ignition | en flames and other ignition sources. No smoking. n source. Do not pierce or burn, even after use. ing should not be allowed out of the workplace. |
| Response | IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. | |
| Storage | Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. | |
| Disposal | Dispose of contents/container in accordance with local/regional/national/international regulations. | |
| Environmental hazards | Hazardous to the aquatic environment, acute hazard | Category 1 |
| | Hazardous to the aquatic environment, long-term hazard | Category 1 |
| Other hazards | None known. | |
| Supplemental information | None. | |

Category 1 Category 1

3. Composition/information on ingredients

Mixtures

| Chemical name | Common name and synonyms | CAS number | % |
|---------------|--------------------------|------------|---------|
| Isobutane | | 75-28-5 | 15 - 40 |

| Chemical name Common name and synonyms | | CAS number | % | |
|--|--|------------|---------|--|
| Naphtha (Petroleum), Hydrotreated Heavy | | 64742-48-9 | 3 - 7 | |
| Propane | | 74-98-6 | 3 - 7 | |
| Distillates (petroleum), Hydrotreated Light | | 64742-47-8 | 1 - 5 | |
| Permethrin | | 52645-53-1 | 0.1 - 1 | |
| Other components below reportable levels | | | 40 - 70 | |

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. In case of eczema or other skin disorders: Seek medical attention and take along these Skin contact instructions. Eye contact Rinse with water. Get medical attention if irritation develops and persists. Ingestion Rinse mouth. Get medical attention if symptoms occur. Most important May cause an allergic skin reaction. Dermatitis. Rash. symptoms/effects, acute and delayed Indication of immediate Provide general supportive measures and treat symptomatically. Keep victim under observation. medical attention and special Symptoms may be delayed. treatment needed **General information** Wash contaminated clothing before reuse.

5. Fire-fighting measures

| Suitable extinguishing media | Not available. |
|---|--|
| Unsuitable extinguishing media | Do not use water jet as an extinguisher, as this will spread the fire. |
| Specific hazards arising from the chemical | Contents under pressure. Pressurized container may explode when exposed to heat or flame. |
| Special protective equipment and precautions for firefighters | Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. |
| Fire fighting equipment/instructions | Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out. |
| Specific methods | Move containers from fire area if you can do so without risk. In the event of fire and/or explosion do not breathe fumes. |
| General fire hazards | Extremely flammable aerosol. |
| 6. Accidental release meas | sures |

| 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 gas. 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 | Refer to attached safety data sheets and/or instructions for use. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Use water spray to reduce vapors or divert vapor cloud drift. Isolate area until gas has dispersed. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS. |
| Environmental precautions | Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. |

7. Handling and storage

| Precautions for safe handling | Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not re-use empty containers. Avoid breathing gas. Avoid contact with eyes, skin, and clothing. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices. |
|--|---|
| Conditions for safe storage, including any incompatibilities | Level 1 Aerosol. |
| | Pressurized container. Protect from sunlight and do not expose to temperatures exceeding |

50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

| Components | Туре | Value | |
|--|---|---|--|
| Isobutane (CAS 75-28-5) | STEL | 1000 ppm | |
| Canada. Alberta OELs (Occ Components | cupational Health & Safety Code, Type | Schedule 1, Table 2) Value | |
| Propane (CAS 74-98-6) | TWA | 1000 ppm | |
| Canada. British Columbia C Safety Regulation 296/97, a | | imits for Chemical Substances, Oc | ccupational Health and |
| Components | Туре | Value | Form |
| Distillates (petroleum), Hydrotreated Light (CAS 64742-47-8) | TWA | 200 mg/m3 | Non-aerosol. |
| Canada. Manitoba OELs (Re | eg. 217/2006, The Workplace Saf | - | |
| Components | Туре | Value | |
| Isobutane (CAS 75-28-5) | STEL | 1000 ppm | |
| Canada. Ontario OELs. (Co Components | ntrol of Exposure to Biological o Type | or Chemical Agents) Value | |
| Isobutane (CAS 75-28-5) | TWA | 800 ppm | |
| Canada. Quebec OELs. (Min Components | nistry of Labor - Regulation Resp Type | pecting the Quality of the Work En Value | vironment) |
| Propane (CAS 74-98-6) | TWA | 1800 mg/m3 1000 ppm | |
| logical limit values | No biological exposure limits not | ted for the ingredient(s). | |
| oosure guidelines | | | |
| Canada - British Columbia Distillates (petroleum), H 64742-47-8) | • | Can be absorbed through the skin. | |
| propriate engineering trols | should be matched to conditions or other engineering controls to | Ily 10 air changes per hour) should b s. If applicable, use process enclosur maintain airborne levels below recon stablished, maintain airborne levels t | es, local exhaust ventilatio nmended exposure limits. I |
| vidual protection measures Eye/face protection | , such as personal protective equ Face shield is recommended. W | uipment /ear safety glasses with side shields | (or goggles). |
| | | | |
| Skin protection Hand protection | For prolonged or repeated skin o | contact use suitable protective gloves | S. |

| Respiratory protection | If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator. |
|-----------------------------------|---|
| Thermal hazards | Wear appropriate thermal protective clothing, when necessary. |
| 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. Contaminated work clothing should not be allowed out of the workplace. |

9. Physical and chemical properties

| , | • |
|--|--|
| Appearance | |
| Physical state | Gas. |
| Form | Aerosol. |
| Color | Not available. |
| Odor | Not available. |
| Odor threshold | Not available. |
| рН | Not available. |
| Melting point/freezing point | Not available. |
| Initial boiling point and boiling range | 165.63 °F (74.24 °C) estimated |
| Flash point | -99.4 °F (-73.0 °C) PROPELLANT estimated |
| Evaporation rate | Not available. |
| Flammability (solid, gas) | Not available. |
| Upper/lower flammability or exp | losive limits |
| Flammability limit - lower (%) | 1.2 % estimated |
| Flammability limit - upper (%) | 9.3 % estimated |
| 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) | Not available. |
| Partition coefficient (n-octanol/water) | Not available. |
| Auto-ignition temperature | 720.56 °F (382.53 °C) estimated |
| Decomposition temperature | Not available. |
| Viscosity | Not available. |
| Other information | |
| Explosive properties | Not explosive. |
| Oxidizing properties | Not oxidizing. |
| Specific gravity | 0.844 estimated |
| 10. Stability and reactivity | |

ReactivityThe product is stable and non-reactive under normal conditions of use, storage and transport.Chemical stabilityMaterial is stable under normal conditions.Possibility of hazardous
reactionsHazardous polymerization does not occur.Conditions to avoidAvoid temperatures exceeding the flash point. Contact with incompatible materials.Incompatible materialsStrong oxidizing agents. Nitrates. Fluorine. Chlorine.Hazardous decomposition
productsNo hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

| Skin contactMay cause an allergic skin reaction.Eye contactDirect contact with eyes may cause temporary irritation.IngestionExpected to be a low ingestion hazard.Symptoms related to the physical, chemical and colocological direct-text is caller gives kin reaction. Dermatitis. Rash.ComponentMay cause an allergic skin reaction.ComponentsSpeciesTest ResultsComponentsSpeciesTest ResultsDistilates (petroleum), Hydrotreated Light (CAS 64742-47-8)2000 mg/kgAcute toxicityRabbit2000 mg/kgDistilates (petroleum), Hydrotreated Light (CAS 64742-47-8)2000 mg/kg, 24 HoursDistilates (petroleum), Hydrotreated Light (CAS 64742-47-8)2000 mg/kg, 24 HoursDistilates (petroleum), Hydrotreated Light (CAS 64742-47-8)2000 mg/kg, 24 HoursDistilates (CAS 75-28-5)3000 mg/kgKatter1235 mg/l, 140 MinutesLCS0Rat237 mg/l, 120 MinutesLCS0Mouse1237 mg/l, 120 MinutesLCS0Rat2480 mg/m3Acute2490 mg/m3, 4 HoursLCS0Rat2490 mg/m3, 4 Hours< | Information on likely routes o | - | acted |
|--|-----------------------------------|--|------------------------|
| Eye contactDirect contact with eyes may cause temporary irrilation.IngestionExpected to be a low ingestion hazard.Symptoms related to theHay cause an allergic skin reaction. Demnatities. Raining temporary irrilation.Protect on toxicological characteristicsHay cause an allergic skin reaction. Demnatities. Raining temporary irrilation.ComponentsMay cause an allergic skin reaction.ComponentsSpeciesExe ResultsDermal-Exe ResultsLossAcute-LossRabbit-LossRabbit-LossRata-CoriaLossRata-LossRata-AcuteLossMause-LossRata-AcuteLossMouse1237 mg/l, 120 MinutesLossRata-AcuteLossRata-AcuteLossMouse-LossRata-AcuteLossRata-AcuteAcuteAcuteAcuteAcuteAcuteAcuteAcuteAcuteAcuteAcuteAcute< | | No adverse effects due to inhalation are expected. | |
| Ingestion Expected to be a low ingestion hazard. Symptoms related to the physical, chemical and toxicological characteristics May cause an allergic skin reaction. Dermatitis, Rash. physical, chemical and toxicological characteristics Information on toxicological effects Vertex Acute toxicity May cause an allergic skin reaction. Components Species Test Results Distillates (petroleum), Hydrotreated Light (CAS 64742-47-8) Section Section Acute toxicity Mabit > 2000 mg/kg Section Dermal LD50 Rat > 2000 mg/kg. 24 Hours Inhalation Section Section Section LD50 Rat > 5000 mg/kg Section LD50 Rat > 5000 mg/kg. 24 Hours Section LD50 Rat 1237 mg/l, 120 Minutes Section LD50 Rat 1237 mg/l, 120 Minutes Section LC50 Rat 1355 mg/l Section LC50 Rat 4980 mg/m3 4980 mg/m3 LC50 Rat 4980 mg/m3 4980 mg/m3 LC50 </th <th></th> <th colspan="2"></th> | | | |
| Symposes Related to the physical, chemical and toxicological effects physical, chemical and toxicological effects Acute toxicity May cause an allergic skin reaction. Dermatitis. Rash. Instruction on toxicological effects Acute toxicity May cause an allergic skin reaction. Components Species Test Results Distlitates (petroleum). Hydrotreated Light (CAS 64742-47-8) Acute Acute Species Test Results Distlitates (petroleum). Hydrotreated Light (CAS 64742-47-8) Acute Species Acute Species Species Species Instantion Species Species Species LO50 Rat Species Species Isobutane (CAS 75-28-5) Acute Species Species Acute Acute Species Species Inhalation Italistion Italistion Italistion Italistion LO50 Mouse 1237 mg/l, 120 Minutes 52 %, 120 Minutes Species Dermal LO50 Rat Species Species Species LO50 Rat Species Species Species <th< th=""><th>-</th><th colspan="2" rowspan="2">Expected to be a low ingestion hazard.</th></th<> | - | Expected to be a low ingestion hazard. | |
| piysical, chemical and toxicological effects Information on toxicological effects Acute toxicity May cause an alergic skin reaction. Components Species Test Results Distillates (patroleum), Hydrotreated Light (CAS 64742-47-8) Acute Dermal LD50 Rabbit - 2000 mg/kg LD50 Rat - 2000 mg/kg. 24 Hours Inhalation LC50 Rat - 7.5 mg/l, 6 Hours Coral LD50 Rat - 55000 mg/kg Isobutane (CAS 75-28-5) Acute Inhalation LC50 Mouse 1237 mg/l, 120 Minutes S2 %, 120 Minutes S2 %, 120 Minutes LD50 Rat - 4960 mg/m3 Acute CAS 76-28-5) Acute Acute CC50 Rat - 5000 mg/kg Isobutane (CAS 74-96-6) CC50 Rat - 4960 mg/m3 Acute - 4960 mg/m3 | - | | |
| Acute toxicity May cause an allergic skin reaction. Components Species Test Results Distillates (petroleum), Hydrotreated Light (CAS 64742-47-8) | physical, chemical and | May cause an allergic skin reaction. Dermatit | is. Rash. |
| ComportSpeciesTest ResultsDistillates (petroloum), Hydrotreated Light (CAS 64742-47-8)AcuteAcuteDermalLD50RabbitLD50RabbitLC50RatCoralLD50RatLD50RatSobotane (CAS 75-28-5)AcuteInhalationLC50MouseLC50MouseSobotane (CAS 75-28-5)AcuteLC50MouseLC50RatSobotane (CAS 75-28-5)AcuteLC50MouseLC50MouseLC50RatLC50RatLC50RabitLC50RabitLC50RabitLC50RabitLC50RabitLD50RatAcuteDermalLC50RabitLC50RatLC50RatAcuteLC50RatAcuteLC50RatAcuteLC50RatLC50RatLC50RatLC50RatLC50RatLC50RatLC50RatLC50RatLC50RatLC50RatLC50MouseLC50MouseLC50MouseLC50MouseLC50MouseLC50MouseLC50MouseLC50Mouse | Information on toxicological | effects | |
| Distillates (petroleum), Hydrotreated Light (CAS 64742-47-8) Actte - Dermal - LD50 Rabbit > 2000 mg/kg Inhalation - - LC50 Rat > 7.5 mg/l, 6 Hours Oral - - LD50 Rat > 5000 mg/kg Oral - - LD50 Rat > 5000 mg/kg Sobutane (CAS 75-28-5) - - Actte Inhalation - LC50 Mouse 1237 mg/l, 120 Minutes Sobutane (CAS 75-28-5) - - Actte Inhalation - LC50 Mouse 1237 mg/l, 120 Minutes Rat 1355 mg/l - Naphtha (Petroleum), Hydrotreated Heavy (CAS 64742-48-9) - - Actte Dermal - 1050 mg/m3, 4 Hours LD50 Rat > 1900 mg/kg, 24 Hours - Inhalation - - - LD50 Rat 4820 mg/m3, 4 Hours | Acute toxicity | May cause an allergic skin reaction. | |
| Acute Dormal D50 Rabbit > 2000 mg/kg LD50 Rabbit > 2000 mg/kg, 24 Hours LC50 Rat > 7.5 mg/l, 6 Hours LC50 Rat > 5000 mg/kg D50 Rat > 5000 mg/kg LD50 Rat > 5000 mg/kg Isobutane (CAS 75-28-5) - - Acute - 5000 mg/kg Isobutane (CAS 75-28-5) - - Acute - 5000 mg/kg LC50 Mouse 1237 mg/l, 120 Minutes LC50 Mouse 1355 mg/l Naphtha (Petroleum), Hydrotreated Heavy (CAS 64742-48-9) - Acute - 900 mg/kg, 24 Hours Dermal - - LC50 Rat - 5000 mg/mg/l, 4 Hours - 4980 mg/m3, 4 Hours - 4980 mg/m3, 4 Hours - LD50 Rat - 24980 mg/m3, 4 Hours | Components | Species | Test Results |
| Dermal 2000 mg/kg L5G Rabit 2000 mg/kg Inlation -2000 mg/kg 2400 mg/kg L5G Rat -7.5 mg/k 640 mg/kg L5G Rat -2.5 mg/k -2.5 mg/kg D7a -2.5 mg/kg -2.5 mg/kg -2.5 mg/kg L5G Rat -2.5 mg/kg -2.5 mg/kg L5D Mass 12.5 mg/kg -2.5 mg/kg L5D Mass 12.5 mg/kg -2.5 mg/kg L5D Rat 2.5 mg/kg -2.5 mg/kg L5D Rat -2.5 mg/kg -2.5 mg/kg <td< td=""><td>Distillates (petroleum), Hydrotre</td><td>eated Light (CAS 64742-47-8)</td><td></td></td<> | Distillates (petroleum), Hydrotre | eated Light (CAS 64742-47-8) | |
| LD50 Rabit > 2000 mg/kg Inhalation > 2000 mg/kg Inhalation > 7.5 mg/k LC50 Rat > 600 mg/kg LD50 Rat > 5000 mg/kg IoS0 Mouse 2 % 120 Minutes IoS0 Mouse 2 % 120 Minutes IoS0 Mouse 355 mg/l IoS0 Rabit > 9000 mg/kg, 24 Hours IoS0 Rabit > 9000 mg/kg, 24 Hours IoS0 Rabit > 4980 mg/m3 IoS0 Rabit > 4980 mg/m3, 4 Hours IoS0 Rat > 4980 mg | | | |
| Inhalation > 7.5 mg/l, 6 Hours LCS0 Rat > 7.5 mg/l, 6 Hours 24.6 mg/l, 4 Hours > 4.6 mg/l, 4 Hours D50 Rat > 5000 mg/kg ID50 Rat > 5000 mg/kg Isobutane (CAS 75-28-5) > > Acute Data > 5237 mg/l, 120 Minutes Isobutane (CAS 75-28-5) . . Acute 1237 mg/l, 120 Minutes LC50 Mouse 1237 mg/l, 120 Minutes LC50 Mouse 1355 mg/l Naphtha (Petroleum), Hydrotreated Heuroisey (CAS 64742-48-9) . . Acute Dermal . . LC50 Rabit . . LC50 Rathaton . . LC50 Rathaton . . LD50 | | | |
| Inhalation > 7.5 mg/l, 6 Hours LC50 Rat > 4.6 mg/l, 4 Hours Oral > 4.6 mg/l, 4 Hours LD50 Rat > 5000 mg/kg Isobutane (CAS 75-28-5) | LD50 | Rabbit | |
| LC50 Rat > 7.5 mg/l, 6 Hours Orai > 4.6 mg/l, 4 Hours LD50 Rat > 5000 mg/kg Isobutarre > 5000 mg/kg Isobutarre > 5000 mg/kg Isobutarre > 5000 mg/kg Isobutarre > 52 % 120 Minutes LC50 Mouse 237 mg/l, 120 Minutes LC50 Mouse 25 % 120 Minutes Katte Xatte 25 % 120 Minutes LC50 Mouse 25 % 120 Minutes Naphtha (Petroteum), Hydrotreated + Set XG 84742-48-99 Xatte Dermal Xatte Xatte LD50 Rabbit > 1900 mg/kg, 24 Hours LD50 Rabbit > 1900 mg/kg, 24 Hours LC50 Rat > 4980 mg/m3, 4 Hours LD50 Rat > 4980 mg/m3, 4 Hours LD50 Rat 4820 mg/kg Promat Xatte Xatte LD50 Rat 4820 mg/kg LD50 Rat Acute LD50 Rat Xatte LD50 Ratte Xatte LC50 <td< td=""><td></td><td></td><td>> 2000 mg/kg, 24 Hours</td></td<> | | | > 2000 mg/kg, 24 Hours |
| Oral | | | 75 / 011 |
| Oral LD50 Rat > 5000 mg/kg Isobutare (CAS 75-28-5) - <td>LC50</td> <td>Rat</td> <td></td> | LC50 | Rat | |
| LD50Rat> 5000 mg/kgISDE URANDE CASTS-28-57Acute InhalationLC50Mouse237 mg/l,120 MinutesLC50Mouse237 mg/l,120 MinutesRat52%,120 MinutesAcute DermalLD50Rabit> 1900 mg/kg,24 HoursLD50Rabit> 1900 mg/kg,24 HoursInhalation> 1900 mg/kg,24 HoursLC50Rat> 5000 mg/m3, 4 HoursLD50Rat> 4980 mg/m3LD50Rat> 4980 mg/m3, 4 HoursLD50Rat> 4980 mg/m3, 4 HoursLD50Rat> 4980 mg/m3, 4 HoursLD50Rat> 4000 mg/m3, 4 HoursLD50RatAcuteLD50RatAcuteLD50RatAcuteLD50RatAcuteLD50RatAcuteLD50MouseXLD50MouseXLD50MouseXLD50MouseXLD50MouseXLD50MouseXLD50MouseXLD50MouseXLD50MouseXLD50MouseXLD50MouseXLD50MouseXLD50MouseXLD50MouseXLD50MouseXLD50MouseXLD50MouseXLD50MouseXLD50Mouse | | | > 4.6 mg/l, 4 Hours |
| Isobutane (CAS 75-28-5) Acute 1237 mg/l, 120 Minutes Inhalation 52 %, 120 Minutes LC50 Mouse 1355 mg/l Rat 1355 mg/l Naphtha (Petroleum), Hydrotreated Hearty (CAS 64742-48-9) 4000 mg/kg, 24 Hours Acute Dermal 1000 mg/kg, 24 Hours LD50 Rabit > 1900 mg/kg, 24 Hours Inhalation > 1900 mg/kg, 24 Hours LC50 Rat > 4980 mg/m3 A geo mg/m3, 4 Hours > 4980 mg/m3 A geo mg/m3, 4 Hours > 4980 mg/m3 LC50 Rat 4820 mg/m3 A geo mg/m3, 4 Hours > 4980 mg/m3 LD50 Rat 4820 mg/m3 A geo mg/m3, 4 Hours > 4980 mg/m3 LD50 Rat 4820 mg/m3 LD50 Rat 4820 mg/kg Propane (CAS 74-98-6) - - LC50 Mouse 1237 mg/l, 120 Minutes LC50 Mouse 1237 mg/l, 120 Minutes LC50 Mouse 52 %, 120 Minutes LC50 Mouse 12 | | Det | |
| Acute Inhalation 237 mg/l, 120 Minutes LC50 Mouse 237 mg/l, 120 Minutes EC50 Rate 22%, 120 Minutes Rat 1355 mg/l 325 mg/l Naphtha (Petroleum), Hydrotreated How (CAS 64742-48-9) 355 mg/l 325 mg/l Acute Dermal 500 mg/kg, 24 Hours 326 mg/l Dermal 200 mg/kg, 24 Hours 326 mg/l 326 mg/l LD50 Rabit > 1900 mg/kg, 24 Hours 326 mg/l LD50 Rath > 5000 mg/m3, 4 Hours 34980 mg/m3 LD50 Rat 34980 mg/m3 34980 mg/m3 LD50 Rat 4820 mg/kg, 24 Hours 34980 mg/m3 LD50 Rat 4820 mg/m3, 4 Hours 34980 mg/m3, 4 Hours LD50 Rate 4820 mg/kg, 24 Hours 34980 mg/m3, 4 Hours LD50 Rate 4820 mg/kg, 24 Hours 34980 mg/m3, 4 Hours LD50 Mouse 1357 mg/l, 120 Minutes 34980 mg/m3, 4 Hours LD50 Mouse 137 mg/l, 120 Minutes 3490 mg/m3, 4 Hours LC50 Mouse | | Rat | > 5000 mg/kg |
| Infaition 1237 mg/l, 120 Minutes LC50 Mouse 22%, 120 Minutes 26%, 120 Minutes 22%, 120 Minutes Rat 355 mg/l Naphtha Vertoleum, Hydrotreated-VertoCAS 64742-48-9) Acute Jong Derma1 Vertoleum, Mg/l, 24 Hours LD50 Rabit > 1000 mg/kg, 24 Hours Inhalation Vertoleum, Mg/l, 24 Hours LC50 Rat > 5000 mg/m3, 4 Hours Age0 mg/m3, 4 Hours > 4980 mg/m3, 4 Hours Vertoleum, Vertoreaction Second mg/l, 4 Hours LC50 Rat Acute Propane CAS 74-98-05 Acute Inhalation Acute Acute Inhalation LC50 Mouse Acute Inhalation LC50 Mouse 237 mg/l, 120 Minutes Inhalation LC50 Mouse 237 mg/l, 120 Minutes Inhalation Image 237 mg/l, 120 Minutes Inhalation Image Image Intervert Image Image | | | |
| LC50 Mouse 237 mg/l, 120 Minutes 26%, 120 Minutes 52%, 120 Minutes Rat 1355 mg/l Naphta //etroleum/, Hydrotreated //etroleum, Hydrotre | | | |
| S2 %, 120 Minutes Rat 1355 mg/l Naphtha (Petroleum), Hydrotreated Heavy (CAS 64742-48-9) 4000 mg/kg, 24 Hours Acute 2000 mg/kg, 24 Hours Dermal 2000 mg/kg, 24 Hours LD50 Rabbit > 1900 mg/kg, 24 Hours LD50 Rather 2000 mg/m3, 4 Hours LC50 Rather > 4980 mg/m3, 4 Hours LD50 Rather 2 4980 mg/m3, 4 Hours LD50 Rather 2 4980 mg/m3, 4 Hours LD50 Rather 2 4980 mg/m3, 4 Hours LD50 Rather 4820 mg/kg Propare (CAS 74-98-6) 4820 mg/kg Propare (CAS 74-98-6) 4820 mg/kg LC50 Mouse 1237 mg/l, 120 Minutes LC50 Kather 1355 mg/l | | Mouse | 1237 mg/L 120 Minutes |
| Rat 1355 mg/l Naphtix (Petroleum), Hydrotreated = U(CAS 64742-48-9) Acute Dermal LD50 Rabbit > 1900 mg/kg, 24 Hours Inhalation > 1000 mg/kg, 24 Hours LC50 Rat > 5000 mg/m3, 4 Hours V - > 4980 mg/m3 V - > 4980 mg/m3, 4 Hours V - > 4980 mg/m3, 4 Hours V - - V - - V - - V - - LD50 Rat Acutes Propare CAS 74-98-61 - LD50 Rat - Acutes - - Inhalation - - LC50 Mouse 1237 mg/l, 120 Minutes LC50 Mouse - Scolo Minutes - - LC50 Mouse 1237 mg/l, 120 Minutes LC50 Rat - - LC50 Marce - - | 2000 | Would | - |
| Naphtha (Petroleum), Hydrotreated Heavy (CAS 64742-48-9) Acute Dermal LD50 Rabit > 1900 mg/kg, 24 Hours Inhalation LC50 Rat > 5000 mg/m3, 4 Hours 4980 mg/m3 4980 mg/m3 4980 mg/m3, 4 Hours 4980 mg/m3, 4 Hours 500, 100 mg/m3, 4 Hours 4980 mg/m3, 4 Hour | | Rat | |
| Acute DermalNoteLD50Rabbit> 1900 mg/kg, 24 HoursInhalation> 5000 mg/m3, 4 HoursLC50Rat> 5000 mg/m3, 4 Hours- 4980 mg/m3> 4980 mg/m3- 4980 mg/m3, 4 Hours> 4980 mg/m3, 4 Hours- 4980 mg/m3, 4 Hours> 4980 mg/m3, 4 Hours- 5000 mg/m3, 4 Hours- mg/m3, 4 H | Nanhtha (Datralaum) Hydratra | | 1000 (119)1 |
| Demal LD50 Rabit > 1900 mg/kg, 24 Hours Inhalation LC50 Rat > 5000 mg/m3, 4 Hours > 4980 mg/m3 > 4980 mg/m3, 4 Hours > 4980 mg/m3, 4 Hours > 4980 mg/m3, 4 Hours LD50 Rat > 4980 mg/m3, 4 Hours LD50 Rat Acute LD50 Rat 4820 mg/kg Propane (CAS 74-98-6) X Acute LC50 Inhalation X LC50 Mouse LC50 Mouse LC50 Mouse LC50 Rat Kat X LC50 Mouse LC50 Mouse LC50 Mouse LC50 Mouse LC50 Mouse LC50 Mainteis LC50 Mainteis LC50 Rat LC50 Mainteis LC50 Rat LC50 X | | aleu Heavy (CAS 04742-40-9) | |
| LD50 Rabbit > 1900 mg/kg, 24 Hours Inhalation LC50 Rat > 5000 mg/m3, 4 Hours > 4980 mg/m3 > 4980 mg/m3, 4 Hours > 4980 mg/m3, 4 Hours = 4980 mg/m3, 4 Hour | | | |
| Inhalation × LC50 Rat > 5000 mg/m3, 4 Hours > 4980 mg/m3 × 4980 mg/m3, 4 Hours > 4980 mg/m3, 4 Hours > 4980 mg/m3, 4 Hours × 4980 mg/m3, 4 Hours > 4980 mg/m3, 4 Hours > 4980 mg/m3, 4 Hours LD50 Rat 4820 mg/kg Propane (CAS 74-98-6) 4820 mg/kg Acute Inhalation Inhalation LC50 Mouse 1237 mg/l, 120 Minutes 52 %, 120 Minutes 52 %, 120 Minutes Kat 1355 mg/l | | Rabbit | > 1900 mg/kg, 24 Hours |
| > 4980 mg/m3 > 4980 mg/m3, 4 Hours > 4980 mg/m3, 4 Hours > 4,96 mg/l, 4 Hours > 100 mg/l > 4,96 mg/l, 4 Hours > 1237 mg/l, 120 Minutes > 52 %, 120 Minutes > 1235 mg/l | Inhalation | | |
| > 4980 mg/m3, 4 Hours > 4.96 mg/l, 4 Hours > 4.96 mg/l, 4 Hours 4820 mg/kg 4820 mg/kg Propane (CAS 74-98-6) Propane (CAS 74-98-6) Acute Inhalation LC50 Mouse Mouse 1237 mg/l, 120 Minutes 52 %, 120 Minutes Rat 1355 mg/l | LC50 | Rat | > 5000 mg/m3, 4 Hours |
| Oral > 4.96 mg/l, 4 Hours LD50 Rat 4820 mg/kg Propane (CAS 74-98-6) - - Acute - - Inhalation - - LC50 Mouse 1237 mg/l, 120 Minutes 52 %, 120 Minutes - - Rat 1355 mg/l - | | | > 4980 mg/m3 |
| Oral LD50 Rat 4820 mg/kg Propane (CAS 74-98-6) 4820 mg/kg Acute 1000000000000000000000000000000000000 | | | > 4980 mg/m3, 4 Hours |
| LD50 Rat 4820 mg/kg Propane (CAS 74-98-6) | | | > 4.96 mg/l, 4 Hours |
| Propane (CAS 74-98-6) Acute Inhalation LC50 Mouse 1237 mg/l, 120 Minutes 52 %, 120 Minutes Rat 1355 mg/l | Oral | | |
| Acute Inhalation LC50 Mouse 1237 mg/l, 120 Minutes 52 %, 120 Minutes 52 %, 120 Minutes Rat 1355 mg/l | LD50 | Rat | 4820 mg/kg |
| Inhalation 1237 mg/l, 120 Minutes LC50 Mouse 52 %, 120 Minutes Fat 1355 mg/l | Propane (CAS 74-98-6) | | |
| LC50 Mouse 1237 mg/l, 120 Minutes 52 %, 120 Minutes Rat 1355 mg/l | Acute | | |
| 52 %, 120 Minutes Rat 1355 mg/l | Inhalation | | |
| Rat 1355 mg/l | LC50 | Mouse | 1237 mg/l, 120 Minutes |
| • | | | 52 %, 120 Minutes |
| | | Rat | 1355 mg/l |
| 658 mg/l/4n | | | 658 mg/l/4h |

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

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

| Serious eye damage/eye irritation | Direct contact with eyes may cause temporary irritation. |
|---|--|
| Respiratory or skin sensitization | 1 |
| 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 | |
| IARC Monographs. Overall | Evaluation of Carcinogenicity |
| Permethrin (CAS 52645- | 53-1) 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.

12. Ecological information

| cotoxicity | Very toxic | to aquatic life with long lasting effects. | |
|-------------------------|----------------------|---|--------------------------------|
| Components | | Species | Test Results |
| Distillates (petroleum) | , Hydrotreated Light | t (CAS 64742-47-8) | |
| Aquatic | | | |
| Fish | LC50 | Rainbow trout,donaldson trout (Oncorhynchus mykiss) | 2.9 mg/l, 96 hours |
| Permethrin (CAS 5264 | 45-53-1) | | |
| Aquatic | | | |
| Crustacea | EC50 | Water flea (Daphnia magna) | 0.0006 - 0.0025 mg/l, 48 hours |
| Fish | LC50 | Apache trout (Oncorhynchus gilae apache) | 0.0013 - 0.0022 mg/l, 96 hours |

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

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential

| Partition coefficie | ent n-octanol / water (log Kow) | |
|---------------------|---------------------------------|------|
| Isobutane | | 2.76 |
| Permethrin | | 6.5 |
| Propane | | 2.36 |
| | No data available | |

Mobility in soil No data 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. Contents under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. 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. Do not re-use empty containers. |

14. Transport information

| IDG | |
|--|---|
| UN number | UN1950 |
| UN proper shipping name | AEROSOLS, flammable |
| Transport hazard class(es) | |
| Class | 2.1 |
| Subsidiary risk | |
| Packing group | Not applicable. |
| Environmental hazards | Yes |
| Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. |
| This product meets the exemp | tion requirements and may be shipped as a limited quantity. |
| ΙΑΤΑ | |
| UN number | UN1950 |
| UN proper shipping name | Aerosols, flammable |
| Transport hazard class(es) | |
| Class | 2.1 |
| Subsidiary risk | - |
| Label(s) | 2.1 |
| Packing group | Not applicable. |
| Environmental hazards | Yes |
| ERG Code | 10L |
| Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. 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 | UN1950 |
| UN proper shipping name | AEROSOLS |
| Transport hazard class(es) | |
| Class | 2.1 |
| Subsidiary risk | |
| Label(s) | 2.1 |
| Packing group | Not applicable. |
| Environmental hazards | |
| Marine pollutant | Yes |
| EmS | F-D, S-U |
| Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. 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 applicable. |
| IATA; IMDG; TDG | |
| | |



Marine pollutant

IMDG Regulated Marine Pollutant.



General information

15. Regulatory information

Canadian regulations

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 (yes/no)* |
|-----------------------------|---|------------------------|
| Australia | Australian Inventory of Chemical Substances (AICS) | Yes |
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |
| China | Inventory of Existing Chemical Substances in China (IECSC) | Yes |
| 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) | Yes |
| New Zealand | New Zealand Inventory | Yes |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | Yes |
| 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) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other Information

| Issue date | 06-06-2019 |
|------------|------------|
| Version # | 02 |

| | 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 | Product and Company Identification: Alternate Trade Names |