SAFETY DATA SHEET
CHAIN GANG (Aerosol)

Section 1. Identification

GHS product identifier : CHAIN GANG
Product code : 53-D 102 (400ml)
SDS no. : L-05E
Product type : Aerosol

Relevant identified uses of the substance or mixture and uses advised against
Identified uses : High load chain lubricant.

Manufacturer

Canada
Walter Surface Technologies Inc.
5977 Trans Canada Highway
Pointe-Claire, QC H9R 1C1
Canada
General Information: 1-888-592-5837
info@walter.com
www.walter.com

United States
Walter Surface Technologies Inc.
810 Day Hill Road
Windsor, CT 06095
United States
General Information: 1-866-592-5837
info.us@walter.com
www.walter.com

Emergency telephone number (with hours of operation) : INFOTRAC® 1-800-535-5053. International call collect: 1-352-323-3500
24 hours/day, 7 days/week.

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : FLAMMABLE AEROSOLS - Category 1
GASES UNDER PRESSURE - Compressed gas
SKIN CORROSION/IRRITATION - Category 2
TOXIC TO REPRODUCTION (Fertility) - Category 2
TOXIC TO REPRODUCTION - Effects on or via lactation
AQUATIC HAZARD (ACUTE) - Category 2
AQUATIC HAZARD (LONG-TERM) - Category 2

GHS label elements

Hazard pictograms :

Tel.: +1-888-GHS-7769 (447-7769) / +1-450-GHS-7767 (447-7767)
Section 2. Hazards identification

Signal word : Danger
Hazard statements:
- H222 - Extremely flammable aerosol.
- H280 - Contains gas under pressure; may explode if heated.
- H315 - Causes skin irritation.
- H361 - Suspected of damaging fertility.
- H362 - May cause harm to breast-fed children.
- H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention:
- P201 - Obtain special instructions before use.
- P202 - Do not handle until all safety precautions have been read and understood.
- P280 - Wear protective gloves, eye protection, and a face mask. Wear protective clothing.
- P210 - Keep away from heat, sparks, flames and other ignition sources. No smoking.
- P211 - Do not spray on an open flame or other ignition source.
- P273 - Avoid release to the environment.
- P260 - Do not breathe dust or mist.
- P263 - Avoid contact with skin, eyes or clothing.
- P270 - Do not eat, drink or smoke when using this product.
- P251 - Pressurized container: Do not pierce or burn, even after use.

Response:
- P391 - Collect spillage.
- P308 + P313 - IF exposed or concerned: Get medical attention.
- P302 + P362 + P364 - IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse.
- P332 + P313 - If skin irritation occurs: Get medical attention.

Storage:
- P405 - Store locked up.
- P410 - Protect from sunlight.
- P412 - Do not expose to temperatures exceeding 50°C/122°F.
- P403 - Store in a well-ventilated place.

Disposal:
- P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise classified:
None known.

Section 3. Composition/information on ingredients

Substance/mixture: Mixture
Product code: 53-D 102 (400ml)

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>%</th>
<th>CAS number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butene, polymer with 2-methyl-1-propene</td>
<td>10 - 30</td>
<td>9044-17-1</td>
</tr>
<tr>
<td>Aikanes, C14-17, chloro</td>
<td>10 - 30</td>
<td>85535-85-9</td>
</tr>
<tr>
<td>Naphtha (petroleum), hydrotreated light</td>
<td>5 - 10</td>
<td>64742-49-0</td>
</tr>
<tr>
<td>2-Methylpentane</td>
<td>1 - 5</td>
<td>107-83-5</td>
</tr>
<tr>
<td>Solvent naphtha (petroleum), light arom.</td>
<td>1 - 5</td>
<td>64742-95-6</td>
</tr>
<tr>
<td>Silica, amorphous, fumed, cryst.-free</td>
<td>0.1 - 1</td>
<td>112945-52-5</td>
</tr>
<tr>
<td>n-Hexane</td>
<td>0.1 - 1</td>
<td>110-54-3</td>
</tr>
</tbody>
</table>

United States: The exact percentage (concentration) in the composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.
Canada: The exact percentage (concentration) in the composition has been withheld as a trade secret in accordance with the amended HPR as of April 2018.
There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.
Section 3. Composition/information on ingredients

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

**Eye contact**: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Continue to rinse for at least 20 minutes. Get medical attention.

**Inhalation**: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately.

**Skin contact**: Flush contaminated skin with plenty of water. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Get medical attention. Wash clothing before reuse.

**Ingestion**: Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately.

Most important symptoms/effects, acute and delayed

**Potential acute health effects**

**Eye contact**: No known significant effects or critical hazards.

**Inhalation**: No known significant effects or critical hazards.

**Skin contact**: Causes skin irritation.

**Ingestion**: No known significant effects or critical hazards.

**Over-exposure signs/symptoms**

**Eye contact**: Adverse symptoms may include the following:
- pain or irritation
- watering
- redness

**Inhalation**: Adverse symptoms may include the following:
- respiratory tract irritation
- coughing
- reduced fetal weight
- increase in fetal deaths
- skeletal malformations

**Skin contact**: Adverse symptoms may include the following:
- irritation
- redness
- reduced fetal weight
- increase in fetal deaths
- skeletal malformations

**Ingestion**: Adverse symptoms may include the following:
- reduced fetal weight
- increase in fetal deaths
- skeletal malformations
Section 4. First aid measures

**Indication of immediate medical attention and special treatment needed, if necessary**

**Notes to physician**
- Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Specific treatments**
- No specific treatment.

**Protection of first-aiders**
- No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

**Extinguishing media**

**Suitable extinguishing media**
- In case of fire, use foam, dry chemical or carbon dioxide.

**Unsuitable extinguishing media**
- Do not use water jet.

**Specific hazards arising from the chemical**
- Extremely flammable aerosol. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

**Hazardous thermal decomposition products**
- Decomposition products may include the following materials:
  - carbon dioxide
  - carbon monoxide
  - sulfur oxides
  - metal oxide/oxides

**Special protective actions for fire-fighters**
- Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

**Special protective equipment for fire-fighters**
- Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

**For non-emergency personnel**
- No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**For emergency responders**
- If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Section 6. Accidental release measures

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

Methods and materials for containment and cleaning up

Spill: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures: Put on appropriate personal protective equipment (see Section 8). Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Avoid exposure - obtain special instructions before use. Avoid contact during pregnancy or while nursing. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing gas. Avoid breathing vapor or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous.

Advice on general occupational hygiene: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities: Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Protect from sunlight. Store locked up. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
### Section 8. Exposure controls/personal protection

#### Control parameters

**United States**

**Occupational exposure limits**

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butene, polymer with 2-methyl-1-propene</td>
<td>None.</td>
</tr>
<tr>
<td>Alkanes, C14-17, chloro</td>
<td>None.</td>
</tr>
<tr>
<td>Naphtha (petroleum), hydrotreated light</td>
<td>None.</td>
</tr>
<tr>
<td>2-Methylpentane</td>
<td>None.</td>
</tr>
<tr>
<td></td>
<td><strong>ACGIH TLV (United States, 3/2018).</strong></td>
</tr>
<tr>
<td></td>
<td>TWA: 500 ppm 8 hours.</td>
</tr>
<tr>
<td></td>
<td>TWA: 1760 mg/m³ 8 hours.</td>
</tr>
<tr>
<td></td>
<td>STEL: 1000 ppm 15 minutes.</td>
</tr>
<tr>
<td></td>
<td>STEL: 3500 mg/m³ 15 minutes.</td>
</tr>
<tr>
<td></td>
<td><strong>NIOSH REL (United States, 10/2016).</strong></td>
</tr>
<tr>
<td></td>
<td>TWA: 100 ppm 10 hours.</td>
</tr>
<tr>
<td></td>
<td>TWA: 350 mg/m³ 10 hours.</td>
</tr>
<tr>
<td></td>
<td>CEIL: 510 ppm 15 minutes.</td>
</tr>
<tr>
<td></td>
<td>CEIL: 1800 mg/m³ 15 minutes.</td>
</tr>
<tr>
<td>Solvent naphtha (petroleum), light arom.</td>
<td>None.</td>
</tr>
<tr>
<td>Silica, amorphous, fumed, cryst.-free</td>
<td><strong>NIOSH REL (United States, 10/2016).</strong></td>
</tr>
<tr>
<td></td>
<td>TWA: 6 mg/m³ 10 hours.</td>
</tr>
<tr>
<td></td>
<td><strong>ACGIH TLV (United States, 3/2018). Absorbed through skin.</strong></td>
</tr>
<tr>
<td></td>
<td>TWA: 50 ppm 8 hours.</td>
</tr>
<tr>
<td></td>
<td><strong>NIOSH REL (United States, 10/2016).</strong></td>
</tr>
<tr>
<td></td>
<td>TWA: 50 ppm 10 hours.</td>
</tr>
<tr>
<td></td>
<td><strong>OSHA PEL (United States, 5/2018).</strong></td>
</tr>
<tr>
<td></td>
<td>TWA: 500 ppm 8 hours.</td>
</tr>
<tr>
<td></td>
<td>TWA: 1800 mg/m³ 8 hours.</td>
</tr>
</tbody>
</table>

**Canada**

**Occupational exposure limits**

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>CA Alberta Provincial (Canada, 6/2018).</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Methylpentane</td>
<td>15 min OEL: 3500 mg/m³ 15 minutes.</td>
</tr>
<tr>
<td></td>
<td>8 hrs OEL: 1760 mg/m³ 8 hours.</td>
</tr>
<tr>
<td></td>
<td>15 min OEL: 1000 ppm 15 minutes.</td>
</tr>
<tr>
<td></td>
<td>8 hrs OEL: 500 ppm 8 hours.</td>
</tr>
<tr>
<td></td>
<td>CA British Columbia Provincial (Canada, 7/2018).</td>
</tr>
<tr>
<td></td>
<td>TWA: 200 ppm 8 hours.</td>
</tr>
<tr>
<td></td>
<td>CA Ontario Provincial (Canada, 1/2018).</td>
</tr>
<tr>
<td></td>
<td>TWA: 500 ppm 8 hours.</td>
</tr>
<tr>
<td></td>
<td>STEL: 1000 ppm 15 minutes.</td>
</tr>
<tr>
<td></td>
<td>CA Quebec Provincial (Canada, 1/2014).</td>
</tr>
<tr>
<td></td>
<td>TWAEV: 500 ppm 8 hours.</td>
</tr>
<tr>
<td></td>
<td>TWAEV: 1760 mg/m³ 8 hours.</td>
</tr>
<tr>
<td></td>
<td>STEV: 1000 ppm 15 minutes.</td>
</tr>
<tr>
<td></td>
<td>STEV: 3500 mg/m³ 15 minutes.</td>
</tr>
<tr>
<td></td>
<td>CA Saskatchewan Provincial (Canada, 7/2013).</td>
</tr>
<tr>
<td></td>
<td>STEL: 1000 ppm 15 minutes.</td>
</tr>
<tr>
<td></td>
<td>TWA: 500 ppm 8 hours.</td>
</tr>
<tr>
<td>n-Hexane</td>
<td>CA Alberta Provincial (Canada, 6/2018). Absorbed through skin.</td>
</tr>
<tr>
<td></td>
<td>8 hrs OEL: 50 ppm 8 hours.</td>
</tr>
<tr>
<td></td>
<td>8 hrs OEL: 176 mg/m³ 8 hours.</td>
</tr>
<tr>
<td></td>
<td>CA British Columbia Provincial (Canada, 7/2018).</td>
</tr>
<tr>
<td></td>
<td>TWA: 20 ppm 8 hours.</td>
</tr>
<tr>
<td></td>
<td>CA Ontario Provincial (Canada, 1/2018). Absorbed through skin.</td>
</tr>
<tr>
<td></td>
<td>TWA: 50 ppm 8 hours.</td>
</tr>
<tr>
<td></td>
<td>CA Quebec Provincial (Canada, 1/2014). Absorbed through skin.</td>
</tr>
<tr>
<td></td>
<td>TWA: 50 ppm 8 hours.</td>
</tr>
<tr>
<td></td>
<td>CA Saskatchewan Provincial (Canada, 7/2013).</td>
</tr>
<tr>
<td></td>
<td>STEL: 62.5 ppm 15 minutes.</td>
</tr>
<tr>
<td></td>
<td>TWA: 50 ppm 8 hours.</td>
</tr>
</tbody>
</table>
Section 8. Exposure controls/personal protection

**Appropriate engineering controls**: No personal respiratory protective equipment normally required. Avoid breathing dust/fume/gas/mist/vapors/spray. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

**Environmental exposure controls**: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

**Individual protection measures**

**Hygiene measures**: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing.

**Eye/face protection**: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

**Skin protection**

**Hand protection**: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. Recommended: Nitrile gloves. (Permeation time > 8 hours)

**Body protection**: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

**Other skin protection**: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection**: Use a NIOSH/MSHA approved respirator if there is a risk of exposure at levels exceeding the exposure limits. Advice should be sought from respiratory protection specialists.

Section 9. Physical and chemical properties

**Appearance**

**Physical state**: Liquid.

**Color**: Not available.

**Odor**: Characteristic.

**Odor threshold**: Not available.

**pH**: Not applicable.

**Melting point**: Not available.

**Boiling point**: Not applicable.

**Flash point**: Not available.

**Evaporation rate**: Not applicable.

**Flammability (solid, gas)**: Extremely flammable aerosol.

**Lower and upper explosive (flammable) limits**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower</td>
<td>1.4%</td>
</tr>
<tr>
<td>Upper</td>
<td>32%</td>
</tr>
</tbody>
</table>
Section 9. Physical and chemical properties

Vapor pressure : Not available.
Vapor density : Not available.
Relative density : 0.71 g/ml @ 20°C (68°F)
Solubility : Insoluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/water : Not available.
Auto-ignition temperature : 510°C (950°F)
Decomposition temperature : Not available.
Viscosity : Dynamic (@ 20°C (68°F)): 2560 cP (Aerosol), 85000 cP (Liquid)
Flow time (ISO 2431) : Not available.
VOC content : 56.3 % (w/w)
Aerosol product
Type of aerosol : Spray
Heat of combustion : 20.16 kJ/g

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.
Chemical stability : The product is stable.
Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid : Avoid all possible sources of ignition (spark or flame).
Incompatible materials : Reactive or incompatible with the following materials: oxidizing materials.
Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solvent naphtha (petroleum), light arom.</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>8400 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Silica, amorphous, fumed, cryst.-free n-Hexane</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>3160 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LC50 Inhalation Gas.</td>
<td>Rat</td>
<td>48000 ppm</td>
<td>4 hours</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>15840 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

Irritation/Corrosion

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Score</th>
<th>Exposure</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solvent naphtha (petroleum), light arom. n-Hexane</td>
<td>Eyes - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 100 µl</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Eyes - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>10 mg</td>
<td>-</td>
</tr>
</tbody>
</table>

Sensitization

There is no data available.
Section 11. Toxicological information

**Mutagenicity**
There is no data available.

**Carcinogenicity**

**Classification**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>OSHA</th>
<th>IARC</th>
<th>NTP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silica, amorphous, fumed, cryst.-free</td>
<td>-</td>
<td>3</td>
<td>-</td>
</tr>
</tbody>
</table>

**Reproductive toxicity**
There is no data available.

**Teratogenicity**
There is no data available.

**Specific target organ toxicity (single exposure)**

<table>
<thead>
<tr>
<th>Name</th>
<th>Category</th>
<th>Target organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphtha (petroleum), hydrotreated light</td>
<td>Category 3</td>
<td>Narcotic effects</td>
</tr>
<tr>
<td>2-Methylpentane</td>
<td>Category 3</td>
<td>Narcotic effects</td>
</tr>
<tr>
<td>Silica, amorphous, fumed, cryst.-free</td>
<td>Category 3</td>
<td>Respiratory tract irritation</td>
</tr>
<tr>
<td>n-Hexane</td>
<td>Category 3</td>
<td>Narcotic effects</td>
</tr>
</tbody>
</table>

**Specific target organ toxicity (repeated exposure)**

<table>
<thead>
<tr>
<th>Name</th>
<th>Category</th>
<th>Target organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>n-Hexane</td>
<td>Category 2</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

**Aspiration hazard**

<table>
<thead>
<tr>
<th>Name</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butene, polymer with 2-methyl-1-propene</td>
<td>ASPIRATION HAZARD - Category 1</td>
</tr>
<tr>
<td>Naphtha (petroleum), hydrotreated light</td>
<td>ASPIRATION HAZARD - Category 1</td>
</tr>
<tr>
<td>2-Methylpentane</td>
<td>ASPIRATION HAZARD - Category 1</td>
</tr>
<tr>
<td>Solvent naphtha (petroleum), light arom.</td>
<td>ASPIRATION HAZARD - Category 1</td>
</tr>
<tr>
<td>n-Hexane</td>
<td>ASPIRATION HAZARD - Category 1</td>
</tr>
</tbody>
</table>

**Information on the likely routes of exposure**
Dermal contact. Eye contact. Inhalation. Ingestion.

**Potential acute health effects**

- **Eye contact**: No known significant effects or critical hazards.
- **Inhalation**: No known significant effects or critical hazards.
- **Skin contact**: Causes skin irritation.
- **Ingestion**: No known significant effects or critical hazards.

**Symptoms related to the physical, chemical and toxicological characteristics**

- **Eye contact**: Adverse symptoms may include the following:
  - pain or irritation
  - watering
  - redness

- **Inhalation**: Adverse symptoms may include the following:
  - respiratory tract irritation
  - coughing
  - reduced fetal weight
  - increase in fetal deaths
  - skeletal malformations
Section 11. Toxicological information

**Skin contact**
- Adverse symptoms may include the following:
  - irritation
  - redness
  - reduced fetal weight
  - increase in fetal deaths
  - skeletal malformations

**Ingestion**
- Adverse symptoms may include the following:
  - reduced fetal weight
  - increase in fetal deaths
  - skeletal malformations

**Delayed and immediate effects and also chronic effects from short and long term exposure**

**Short term exposure**
- **Potential immediate effects**: No known significant effects or critical hazards.
- **Potential delayed effects**: No known significant effects or critical hazards.

**Long term exposure**
- **Potential immediate effects**: No known significant effects or critical hazards.
- **Potential delayed effects**: No known significant effects or critical hazards.

**Potential chronic health effects**
- **General**: No known significant effects or critical hazards.
- **Carcinogenicity**: No known significant effects or critical hazards.
- **Mutagenicity**: No known significant effects or critical hazards.
- **Teratogenicity**: No known significant effects or critical hazards.
- **Developmental effects**: May cause harm to breast-fed children.
- **Fertility effects**: Suspected of damaging fertility.

**Numerical measures of toxicity**

**Acute toxicity estimates**
- There is no data available.

Section 12. Ecological information

**Toxicity**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>n-Hexane</td>
<td>Acute LC50 2500 µg/L Fresh water</td>
<td>Fish - Pimephales promelas</td>
<td>96 hours</td>
</tr>
</tbody>
</table>

**Persistence and degradability**
- There is no data available.

**Bioaccumulative potential**
Section 12. Ecological information

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>LogP&lt;sub&gt;ow&lt;/sub&gt;</th>
<th>BCF</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alkanes, C14-17, chloro Naphtha (petroleum), hydrotreated light</td>
<td>4.7 to 8.3, 2.2 to 5.2</td>
<td>-</td>
<td>high</td>
</tr>
<tr>
<td>Solvent naphtha (petroleum), light arom. n-Hexane</td>
<td>4</td>
<td>501.187</td>
<td>high</td>
</tr>
</tbody>
</table>

Mobility in soil

Soil/water partition coefficient (K<sub>OC</sub>): Not available.

Other adverse effects: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

Section 14. Transport information

<table>
<thead>
<tr>
<th>UN number</th>
<th>DOT Classification</th>
<th>TDG Classification</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN1950</td>
<td>Aerosols, flammable (each not exceeding 1 L capacity)</td>
<td>Aerosols, flammable (each not exceeding 1 L capacity)</td>
<td>Aerosols, flammable (each not exceeding 1 L capacity)</td>
<td>Aerosols, flammable (each not exceeding 1 L capacity)</td>
</tr>
</tbody>
</table>

Transport hazard class(es): 2.1

Packing group: -

Environmental hazards: Yes.

Additional information

DOT Classification: This product is not regulated as a marine pollutant when transported on inland waterways in sizes of ≤5 L or ≤5 kg or by road, rail, or inland air in non-bulk sizes, provided the packagings meet the general provisions of §§ 173.24 and 173.24a.

AERG: 126
Section 14. Transport information

**TDG Classification**: Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.13-2.17 (Class 2), 2.7 (Marine pollutant mark).

The marine pollutant mark is not required when transported by road or rail.

**IMDG**: The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.

**IATA**: The environmentally hazardous substance mark may appear if required by other transportation regulations.

**Special precautions for user**: Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage. Protect from freezing. Freezing will damage product and render it unusable.

Section 15. Regulatory information

**U.S. Federal regulations**

- **Clean Air Act (CAA) 112 regulated flammable substances**: Butane; Propane; Isobutane

- **Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)**: Listed

- **Clean Air Act Section 602 Class I Substances**: Not listed

- **Clean Air Act Section 602 Class II Substances**: Not listed

- **DEA List I Chemicals (Precursor Chemicals)**: Not listed

- **DEA List II Chemicals (Essential Chemicals)**: Not listed

- **SARA 302/304**

  **Composition/information on ingredients**: No products were found.

- **SARA 304 RQ**: Not applicable.

- **SARA 311/312**

  **Classification**: FLAMMABLE AEROSOLS - Category 1
  GASES UNDER PRESSURE - Compressed gas
  TOXIC TO REPRODUCTION (Fertility) - Category 2
  TOXIC TO REPRODUCTION - Effects on or via lactation

  **Composition/information on ingredients**
## Section 15. Regulatory information

<table>
<thead>
<tr>
<th>Name</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butene, polymer with 2-methyl-1-propene</td>
<td>ASPIRATION HAZARD - Category 1</td>
</tr>
<tr>
<td>Alkanes, C14-17, chloro</td>
<td>TOXIC TO REPRODUCTION - Effects on or via lactation</td>
</tr>
<tr>
<td>Naphtha (petroleum), hydrotreated light</td>
<td>FLAMMABLE LIQUIDS - Category 2</td>
</tr>
<tr>
<td>2-Methylpentane</td>
<td>ASPIRATION HAZARD - Category 1</td>
</tr>
<tr>
<td>Solvent naphtha (petroleum), light arom.</td>
<td>FLAMMABLE LIQUIDS - Category 2</td>
</tr>
<tr>
<td>Silica, amorphous, fumed, cryst.-free</td>
<td>SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A</td>
</tr>
<tr>
<td>n-Hexane</td>
<td>ASPIRATION HAZARD - Category 1</td>
</tr>
<tr>
<td></td>
<td>FLAMMABLE LIQUIDS - Category 2</td>
</tr>
<tr>
<td></td>
<td>SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A</td>
</tr>
<tr>
<td></td>
<td>SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3</td>
</tr>
<tr>
<td></td>
<td>SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3</td>
</tr>
<tr>
<td></td>
<td>SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2</td>
</tr>
</tbody>
</table>

### SARA 313

There is no data available.

### State regulations

**Massachusetts**

The following components are listed: Butane; Propane; Isobutane; Distillates (petroleum), solvent-dewaxed heavy paraffinic; 2-Methylpentane; Molybdenum Disulphide

**New York**

None of the components are listed.

**New Jersey**

The following components are listed: Alkanes, C14-17, chloro; Butane; Propane; Isobutane; 2-Methylpentane

**Pennsylvania**

The following components are listed: Butane; Propane; Isobutane; 2-Methylpentane

### California Prop. 65

**WARNING:** This product can expose you to n-Hexane, 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.

### Canada

**Canadian lists**

**Canadian NPRI**

The following components are listed: Alkanes, C14-17, chloro; Butane; Propane; Isobutane; 2-Methylpentane; Solvent naphtha (petroleum), light arom.

**CEPA Toxic substances**

The following components are listed: Alkanes, C14-17, chloro

**Canada inventory (DSL NDSL)**

- **China:** All components are listed or exempted.
- **Malaysia:** Not determined
- **Philippines:** All components are listed or exempted.
- **Republic of Korea:** All components are listed or exempted.
- **Taiwan:** All components are listed or exempted.
Section 16. Other information

Procedure used to derive the classification

<table>
<thead>
<tr>
<th>Classification</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLAMMABLE AEROSOLS - Category 1</td>
<td>On basis of test data</td>
</tr>
<tr>
<td>GASES UNDER PRESSURE - Compressed gas</td>
<td>Expert judgment</td>
</tr>
<tr>
<td>SKIN CORROSION/IRRITATION - Category 2</td>
<td>Calculation method</td>
</tr>
<tr>
<td>TOXIC TO REPRODUCTION (Fertility) - Category 2</td>
<td>Calculation method</td>
</tr>
<tr>
<td>TOXIC TO REPRODUCTION - Effects on or via lactation</td>
<td>Calculation method</td>
</tr>
<tr>
<td>AQUATIC HAZARD (ACUTE) - Category 2</td>
<td>Calculation method</td>
</tr>
<tr>
<td>AQUATIC HAZARD (LONG-TERM) - Category 2</td>
<td>Calculation method</td>
</tr>
</tbody>
</table>

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Version : 3
Prepared by : KMK Regulatory Services Inc.

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