



# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

**Material name** STEEL-IT #1002b Polyurethane (aerosol)  
**Version #** 02  
**Issue date** 07-17-2012  
**Revision date** 08-20-2012  
**Supersedes date** 07-17-2012  
**CAS #** Mixture  
**(M)SDS number** SDS-1002b-GER  
**Product use** Paint / Industrial coating.  
**Manufacturer/Supplier** Stainless Steel Coatings, Inc  
835 Sterling Road  
South Lancaster, MA, 01561  
sds@steel-it.com  
(978) 365-9828  
**Emergency** CHEMTREC, 1-800-424-9300

## 2. Hazards Identification

**Physical state** Liquid.  
**Appearance** Aerosol- Pressurized Liquid.  
**Emergency overview** WARNING! Extremely flammable aerosol - contents under pressure. Will be easily ignited by heat, spark or flames. May cause cancer. May cause sensitization by skin contact. May cause damage to the kidneys. May cause central nervous system effects. Causes skin and eye irritation. Causes respiratory tract irritation if inhaled.  
**OSHA regulatory status** This product is hazardous according to OSHA 29 CFR 1910.1200.  
**Potential health effects**  
**Routes of exposure** Eye contact. Inhalation. Skin contact.  
**Eyes** Causes eye irritation.  
**Skin** Causes skin irritation. Prolonged or repeated contact may dry skin and cause irritation. May cause sensitization by skin contact.  
**Inhalation** May cause respiratory tract irritation. Overexposure to mists/vapors of this product may cause headache, dizziness, nausea, and respiratory tract irritation.  
**Ingestion** May cause discomfort if swallowed.  
**Target organs** Kidneys. Central nervous system. Lungs.  
**Chronic effects** Exposure over a long period of time may cause central nervous system effects.  
  
The product contains nickel which is listed by IARC and NTP as a possible human carcinogen and anticipated human carcinogen respectively.  
**Signs and symptoms** Sensitization. Skin irritation. Prolonged or repeated contact may dry skin and cause irritation. Upper respiratory tract irritation. Drowsiness and dizziness.  
**Potential environmental effects** Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

## 3. Composition / Information on Ingredients

| Components                                        | CAS #     | Percent |
|---------------------------------------------------|-----------|---------|
| Propane                                           | 74-98-6   | 12-18   |
| Acetone                                           | 67-64-1   | 10-16   |
| 4-Chloro-.alpha.,.alpha.,.alpha.-trifluorotoluene | 98-56-6   | 10-15   |
| Stoddard solvent                                  | 8052-41-3 | 10-15   |
| Butane                                            | 106-97-8  | 8-14    |

| Components                                   | CAS #      | Percent |
|----------------------------------------------|------------|---------|
| Solvent naphtha (petroleum), medium aliph.   | 64742-88-7 | 3-5     |
| Chromium                                     | 7440-47-3  | 2 - 3   |
| Distillates, (petroleum), hydrotreated light | 64742-47-8 | 1-2     |
| Nickel                                       | 7440-02-0  | 1-2     |
| Ethylbenzene                                 | 100-41-4   | <0.1    |
| Quartz                                       | 14808-60-7 | <0.1    |

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

## 4. First Aid Measures

### First aid procedures

**Eye contact** Check for and remove any contact lenses. Immediately flush with plenty of water for up to 15 minutes. Get medical attention immediately.

**Skin contact** Wash area with soap and water. Get medical attention if irritation develops or persists.

**Inhalation** If symptomatic, move to fresh air. Get medical attention if symptoms persist.

**Ingestion** Get medical attention if any discomfort occurs.

**Notes to physician** Treat symptomatically.

**General advice** Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## 5. Fire Fighting Measures

**Flammable properties** Extremely flammable aerosol - contents under pressure. Containers may explode when heated.

### Extinguishing media

**Suitable extinguishing media** Carbon dioxide (CO<sub>2</sub>). Foam. Dry chemical. Water fog.

**Unsuitable extinguishing media** Do not use water jet as an extinguisher, as this will spread the fire.

### Protection of firefighters

**Protective equipment and precautions for firefighters** Self-contained breathing apparatus.

**Fire fighting equipment/instructions** Move container from fire area if it can be done without risk.

**Hazardous combustion products** During fire, gases hazardous to health may be formed.

## 6. Accidental Release Measures

**Personal precautions** Ensure adequate ventilation. Wear suitable protective clothing. See Section 8 of the MSDS for Personal Protective Equipment.

**Environmental precautions** Prevent entry into waterways, sewer, basements or confined areas.

**Methods for containment** ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do so without risk. Dike the spilled material, where this is possible. Prevent entry into waterways, sewer, basements or confined areas.

**Methods for cleaning up** Large Spills: Dike far ahead of liquid spill for later recovery and disposal. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

Small Liquid Spills: Absorb up with sand or other non-combustible absorbent material.

Following product recovery, flush area with water. Clean surface thoroughly to remove residual contamination.

## 7. Handling and Storage

### Handling

Use only with adequate ventilation. Wash thoroughly after handling. Observe good industrial hygiene practices. Avoid inhalation of aerosols. Avoid contact with skin and eyes.

### Storage

Store locked up. Keep container tightly closed and in a well-ventilated place. Store in closed original container at room temperature. Store away from incompatible materials.

## 8. Exposure Controls / Personal Protection

### Occupational exposure limits

#### US. ACGIH Threshold Limit Values

| Components                                                  | Type | Value       | Form                 |
|-------------------------------------------------------------|------|-------------|----------------------|
| Acetone (CAS 67-64-1)                                       | STEL | 750 ppm     |                      |
|                                                             | TWA  | 500 ppm     |                      |
| Chromium (CAS 7440-47-3)                                    | TWA  | 0.5 mg/m3   |                      |
| Ethylbenzene (CAS 100-41-4)                                 | TWA  | 20 ppm      |                      |
| Nickel (CAS 7440-02-0)                                      | TWA  | 1.5 mg/m3   | Inhalable fraction.  |
| Propane (CAS 74-98-6)                                       | TWA  | 1000 ppm    |                      |
| Quartz (CAS 14808-60-7)                                     | TWA  | 0.025 mg/m3 | Respirable fraction. |
| Solvent naphtha (petroleum), medium aliph. (CAS 64742-88-7) | TWA  | 5 mg/m3     | Inhalable fraction.  |
| Stoddard solvent (CAS 8052-41-3)                            | TWA  | 100 ppm     |                      |

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

| Components                                                  | Type | Value      | Form  |
|-------------------------------------------------------------|------|------------|-------|
| Acetone (CAS 67-64-1)                                       | PEL  | 2400 mg/m3 |       |
|                                                             |      | 1000 ppm   |       |
| Chromium (CAS 7440-47-3)                                    | PEL  | 1 mg/m3    |       |
| Ethylbenzene (CAS 100-41-4)                                 | PEL  | 435 mg/m3  |       |
|                                                             |      | 100 ppm    |       |
| Nickel (CAS 7440-02-0)                                      | PEL  | 1 mg/m3    |       |
| Propane (CAS 74-98-6)                                       | PEL  | 1800 mg/m3 |       |
|                                                             |      | 1000 ppm   |       |
| Solvent naphtha (petroleum), medium aliph. (CAS 64742-88-7) | PEL  | 5 mg/m3    | Mist. |
| Stoddard solvent (CAS 8052-41-3)                            | PEL  | 2900 mg/m3 |       |
|                                                             |      | 500 ppm    |       |

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

| Components              | Type | Value     | Form        |
|-------------------------|------|-----------|-------------|
| Quartz (CAS 14808-60-7) | TWA  | 0.3 mg/m3 | Total dust. |
|                         |      | 0.1 mg/m3 | Respirable. |
|                         |      | 2.4 mppcf | Respirable. |

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

| Components                                                    | Type | Value      | Form   |
|---------------------------------------------------------------|------|------------|--------|
| Acetone (CAS 67-64-1)                                         | STEL | 1800 mg/m3 |        |
|                                                               | TWA  | 750 ppm    |        |
|                                                               |      | 1200 mg/m3 |        |
|                                                               |      | 500 ppm    |        |
| Butane (CAS 106-97-8)                                         | TWA  | 1000 ppm   |        |
| Chromium (CAS 7440-47-3)                                      | TWA  | 0.5 mg/m3  |        |
| Distillates, (petroleum), hydrotreated light (CAS 64742-47-8) | TWA  | 200 mg/m3  | Vapor. |

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

| Components                                                  | Type | Value       | Form                  |
|-------------------------------------------------------------|------|-------------|-----------------------|
| Ethylbenzene (CAS 100-41-4)                                 | STEL | 543 mg/m3   |                       |
|                                                             |      | 125 ppm     |                       |
|                                                             | TWA  | 434 mg/m3   |                       |
|                                                             |      | 100 ppm     |                       |
| Nickel (CAS 7440-02-0)                                      | TWA  | 1.5 mg/m3   |                       |
| Propane (CAS 74-98-6)                                       | TWA  | 1000 ppm    |                       |
| Quartz (CAS 14808-60-7)                                     | TWA  | 0.025 mg/m3 | Respirable particles. |
| Solvent naphtha (petroleum), medium aliph. (CAS 64742-88-7) | STEL | 10 mg/m3    | Mist.                 |
|                                                             | TWA  | 5 mg/m3     | Mist.                 |
| Stoddard solvent (CAS 8052-41-3)                            | TWA  | 572 mg/m3   |                       |
|                                                             |      | 100 ppm     |                       |

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

| Components                                                    | Type | Value       | Form                 |
|---------------------------------------------------------------|------|-------------|----------------------|
| Acetone (CAS 67-64-1)                                         | STEL | 500 ppm     |                      |
|                                                               | TWA  | 250 ppm     |                      |
| Butane (CAS 106-97-8)                                         | STEL | 750 ppm     |                      |
|                                                               | TWA  | 1000 ppm    |                      |
| Chromium (CAS 7440-47-3)                                      | TWA  | 0.5 mg/m3   |                      |
| Distillates, (petroleum), hydrotreated light (CAS 64742-47-8) | TWA  | 200 mg/m3   | Non-aerosol.         |
| Ethylbenzene (CAS 100-41-4)                                   | TWA  | 20 ppm      |                      |
| Nickel (CAS 7440-02-0)                                        | TWA  | 0.05 mg/m3  |                      |
| Propane (CAS 74-98-6)                                         | TWA  | 1000 ppm    |                      |
| Quartz (CAS 14808-60-7)                                       | TWA  | 0.025 mg/m3 | Respirable fraction. |
| Solvent naphtha (petroleum), medium aliph. (CAS 64742-88-7)   | TWA  | 1 mg/m3     | Mist.                |
| Stoddard solvent (CAS 8052-41-3)                              | STEL | 580 mg/m3   |                      |
|                                                               | TWA  | 290 mg/m3   |                      |

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

| Components                                                  | Type | Value     | Form        |
|-------------------------------------------------------------|------|-----------|-------------|
| Acetone (CAS 67-64-1)                                       | STEL | 750 ppm   |             |
|                                                             | TWA  | 500 ppm   |             |
| Butane (CAS 106-97-8)                                       | TWA  | 800 ppm   |             |
| Chromium (CAS 7440-47-3)                                    | TWA  | 0.5 mg/m3 |             |
| Ethylbenzene (CAS 100-41-4)                                 | STEL | 125 ppm   |             |
|                                                             | TWA  | 100 ppm   |             |
| Nickel (CAS 7440-02-0)                                      | TWA  | 1 mg/m3   | Inhalable   |
| Propane (CAS 74-98-6)                                       | TWA  | 1000 ppm  |             |
| Quartz (CAS 14808-60-7)                                     | TWA  | 0.1 mg/m3 | Respirable. |
| Solvent naphtha (petroleum), medium aliph. (CAS 64742-88-7) | STEL | 10 mg/m3  | Mist.       |
|                                                             | TWA  | 5 mg/m3   | Mist.       |
| Stoddard solvent (CAS 8052-41-3)                            | TWA  | 100 ppm   |             |

**Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)**

| Components                  | Type | Value      | Form             |
|-----------------------------|------|------------|------------------|
| Acetone (CAS 67-64-1)       | STEL | 2380 mg/m3 |                  |
|                             |      | 1000 ppm   |                  |
|                             | TWA  | 1190 mg/m3 |                  |
| Butane (CAS 106-97-8)       |      | 500 ppm    |                  |
|                             | TWA  | 1900 mg/m3 |                  |
|                             |      | 800 ppm    |                  |
| Chromium (CAS 7440-47-3)    | TWA  | 0.5 mg/m3  |                  |
| Ethylbenzene (CAS 100-41-4) | STEL | 543 mg/m3  |                  |
|                             |      | 125 ppm    |                  |
|                             | TWA  | 434 mg/m3  |                  |
| Nickel (CAS 7440-02-0)      |      | 100 ppm    |                  |
|                             | TWA  | 1 mg/m3    |                  |
|                             | TWA  | 1800 mg/m3 |                  |
| Propane (CAS 74-98-6)       |      | 1000 ppm   |                  |
|                             | TWA  | 0.1 mg/m3  | Respirable dust. |
|                             | STEL | 10 mg/m3   | Mist.            |
| Quartz (CAS 14808-60-7)     |      | 5 mg/m3    | Mist.            |
|                             | TWA  | 525 mg/m3  |                  |
|                             |      | 100 ppm    |                  |

**Mexico. Occupational Exposure Limit Values**

| Components                                                  | Type | Value      | Form  |
|-------------------------------------------------------------|------|------------|-------|
| Acetone (CAS 67-64-1)                                       | STEL | 3000 mg/m3 |       |
|                                                             |      | 1260 ppm   |       |
|                                                             | TWA  | 2400 mg/m3 |       |
| Butane (CAS 106-97-8)                                       |      | 1000 ppm   |       |
|                                                             | TWA  | 1900 mg/m3 |       |
|                                                             |      | 800 ppm    |       |
| Chromium (CAS 7440-47-3)                                    | TWA  | 0.5 mg/m3  |       |
| Ethylbenzene (CAS 100-41-4)                                 | STEL | 545 mg/m3  |       |
|                                                             |      | 125 ppm    |       |
|                                                             | TWA  | 435 mg/m3  |       |
| Nickel (CAS 7440-02-0)                                      |      | 100 ppm    |       |
|                                                             | TWA  | 1 mg/m3    |       |
|                                                             | TWA  | 0.1 mg/m3  |       |
| Quartz (CAS 14808-60-7)                                     |      | 10 mg/m3   | Mist. |
|                                                             | STEL |            |       |
|                                                             |      |            |       |
| Solvent naphtha (petroleum), medium aliph. (CAS 64742-88-7) |      | 5 mg/m3    | Mist. |
|                                                             | TWA  |            |       |
|                                                             |      |            |       |
| Stoddard solvent (CAS 8052-41-3)                            | STEL | 1050 mg/m3 |       |
|                                                             |      | 200 ppm    |       |
|                                                             | TWA  | 523 mg/m3  |       |
|                                                             |      | 100 ppm    |       |

**Engineering controls** Provide adequate ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation of vapors.

**Personal protective equipment**

**Eye / face protection** Use approved safety goggles or face shield.

**Skin protection** Wear appropriate chemical resistant clothing to prevent any possibility of skin contact. Nitrile chemical resistant gloves are recommended. Suitable gloves can be recommended by the glove supplier.

**Respiratory protection** In case of inadequate ventilation, use respiratory protection. In case of inadequate ventilation or when the product is heated, use suitable respiratory equipment with gas filter for organic gas.

**General hygiene considerations**

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 & Chemical Properties**

|                                                       |                                               |
|-------------------------------------------------------|-----------------------------------------------|
| <b>Appearance</b>                                     | Aerosol- Pressurized Liquid.                  |
| <b>Physical state</b>                                 | Liquid.                                       |
| <b>Form</b>                                           | Spray.                                        |
| <b>Color</b>                                          | Silver.                                       |
| <b>Odor</b>                                           | Characteristic of solvents.                   |
| <b>Odor threshold</b>                                 | No data available.                            |
| <b>pH</b>                                             | Not established.                              |
| <b>Vapor pressure</b>                                 | < 0.48 mPa (at 10 °C/ 70°F)                   |
| <b>Vapor density</b>                                  | > 1 (Air = 1)                                 |
| <b>Boiling point</b>                                  | -0.4 - 350.6 °F (-18 - 177 °C)                |
| <b>Melting point/Freezing point</b>                   | Not established.                              |
| <b>Solubility (water)</b>                             | No data available.                            |
| <b>Specific gravity</b>                               | 0.849 (at 15°C/ 60°F)                         |
| <b>Flash point</b>                                    | < 99 °F (< 37.2 °C)                           |
| <b>Flammability limits in air, upper, % by volume</b> | 10 %                                          |
| <b>Flammability limits in air, lower, % by volume</b> | 2 %                                           |
| <b>Auto-ignition temperature</b>                      | No data available.                            |
| <b>VOC</b>                                            | 43.28 % Test Method: Product Formulation Data |
| <b>Evaporation rate</b>                               | Faster than ether (butyl acetate = 1)         |
| <b>Viscosity</b>                                      | No data available.                            |
| <b>Percent volatile</b>                               | No data available.                            |
| <b>Partition coefficient (n-octanol/water)</b>        | No data available.                            |
| <b>Bulk density</b>                                   | Not applicable.                               |
| <b>Other data</b>                                     |                                               |
| <b>Decomposition temperature</b>                      | Not established.                              |
| <b>Flammability (solid, gas)</b>                      | No data available.                            |
| <b>Oxidizing properties</b>                           | No data available.                            |
| <b>Solubility (other)</b>                             | Not established.                              |

**10. Chemical Stability & Reactivity Information**

|                                           |                                                            |
|-------------------------------------------|------------------------------------------------------------|
| <b>Chemical stability</b>                 | Material is stable under normal conditions.                |
| <b>Conditions to avoid</b>                | Heat, sparks, flames. Contact with incompatible materials. |
| <b>Incompatible materials</b>             | Strong oxidizing agents.                                   |
| <b>Hazardous decomposition products</b>   | Metal oxides.                                              |
| <b>Possibility of hazardous reactions</b> | Hazardous polymerization does not occur.                   |

## 11. Toxicological Information

### Toxicological data

| Components                                                  | Species                                                                                                                                                                              | Test Results                |
|-------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| Acetone (CAS 67-64-1)                                       |                                                                                                                                                                                      |                             |
| Acute                                                       |                                                                                                                                                                                      |                             |
| Dermal                                                      |                                                                                                                                                                                      |                             |
| LD50                                                        | Rabbit                                                                                                                                                                               | 20000 mg/kg                 |
| Inhalation                                                  |                                                                                                                                                                                      |                             |
| LC50                                                        | Rat                                                                                                                                                                                  | 50 mg/l, 8 Hours            |
| Oral                                                        |                                                                                                                                                                                      |                             |
| LD50                                                        | Rat                                                                                                                                                                                  | 5800 mg/kg                  |
| Butane (CAS 106-97-8)                                       |                                                                                                                                                                                      |                             |
| Acute                                                       |                                                                                                                                                                                      |                             |
| Inhalation                                                  |                                                                                                                                                                                      |                             |
| LC50                                                        | Mouse                                                                                                                                                                                | 680 mg/l, 2 Hours           |
|                                                             | Rat                                                                                                                                                                                  | 658 mg/l, 4 Hours           |
| Propane (CAS 74-98-6)                                       |                                                                                                                                                                                      |                             |
| Acute                                                       |                                                                                                                                                                                      |                             |
| Inhalation                                                  |                                                                                                                                                                                      |                             |
| LC50                                                        | Rat                                                                                                                                                                                  | > 1442.847 mg/l, 15 Minutes |
| Sensitization                                               | May cause an allergic skin reaction.                                                                                                                                                 |                             |
| Acute effects                                               | Overexposure to mists/vapors of this product may cause headache, dizziness, nausea, and respiratory tract irritation. Causes skin and eye irritation.                                |                             |
| Carcinogenicity                                             | Suspected of causing cancer.                                                                                                                                                         |                             |
| ACGIH Carcinogens                                           |                                                                                                                                                                                      |                             |
| Acetone (CAS 67-64-1)                                       | A4 Not classifiable as a human carcinogen.                                                                                                                                           |                             |
| Chromium (CAS 7440-47-3)                                    | A4 Not classifiable as a human carcinogen.                                                                                                                                           |                             |
| Ethylbenzene (CAS 100-41-4)                                 | A3 Confirmed animal carcinogen with unknown relevance to humans.                                                                                                                     |                             |
| Nickel (CAS 7440-02-0)                                      | A5 Not suspected as a human carcinogen.                                                                                                                                              |                             |
| Quartz (CAS 14808-60-7)                                     | A2 Suspected human carcinogen.                                                                                                                                                       |                             |
| Solvent naphtha (petroleum), medium aliph. (CAS 64742-88-7) | A4 Not classifiable as a human carcinogen.                                                                                                                                           |                             |
| IARC Monographs. Overall Evaluation of Carcinogenicity      |                                                                                                                                                                                      |                             |
| Chromium (CAS 7440-47-3)                                    | 3 Not classifiable as to carcinogenicity to humans.                                                                                                                                  |                             |
| Ethylbenzene (CAS 100-41-4)                                 | 2B Possibly carcinogenic to humans.                                                                                                                                                  |                             |
| Nickel (CAS 7440-02-0)                                      | 1 Carcinogenic to humans.                                                                                                                                                            |                             |
| Quartz (CAS 14808-60-7)                                     | 1 Carcinogenic to humans.                                                                                                                                                            |                             |
| Solvent naphtha (petroleum), medium aliph. (CAS 64742-88-7) | 3 Not classifiable as to carcinogenicity to humans.                                                                                                                                  |                             |
| Stoddard solvent (CAS 8052-41-3)                            | 3 Not classifiable as to carcinogenicity to humans.                                                                                                                                  |                             |
| US NTP Report on Carcinogens: Anticipated carcinogen        |                                                                                                                                                                                      |                             |
| Nickel (CAS 7440-02-0)                                      | Reasonably Anticipated to be a Human Carcinogen.                                                                                                                                     |                             |
| US NTP Report on Carcinogens: Known carcinogen              |                                                                                                                                                                                      |                             |
| Nickel (CAS 7440-02-0)                                      | Known To Be Human Carcinogen.                                                                                                                                                        |                             |
| Quartz (CAS 14808-60-7)                                     | Known To Be Human Carcinogen.                                                                                                                                                        |                             |
| Mutagenicity                                                | There is no data to indicate that any component present at greater than 0.1% may present a risk.                                                                                     |                             |
| Teratogenicity                                              | There is no data to indicate that any component present at greater than 0.1% may present a risk.                                                                                     |                             |
| Symptoms and target organs                                  | Causes skin and eye irritation. Sensitization. Prolonged or repeated contact may dry skin and cause irritation. Upper respiratory tract irritation. Headaches, dizziness and nausea. |                             |

## 12. Ecological Information

### Ecotoxicological data

| Components                      | Species                                                                                       | Test Results                                              |
|---------------------------------|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------|
| Acetone (CAS 67-64-1)           |                                                                                               |                                                           |
| Aquatic                         |                                                                                               |                                                           |
| Fish                            | LC50                                                                                          | Fathead minnow (Pimephales promelas) > 100 mg/l, 96 hours |
| Ecotoxicity                     | Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |                                                           |
| Persistence and degradability   | No data available.                                                                            |                                                           |
| Bioaccumulation / Accumulation  | No data available.                                                                            |                                                           |
| Partition coefficient           |                                                                                               |                                                           |
| Acetone                         |                                                                                               | -0.24                                                     |
| Propane                         |                                                                                               | 2.36                                                      |
| Butane                          |                                                                                               | 2.89                                                      |
| Stoddard solvent                |                                                                                               | 3.16 - 7.15                                               |
| Mobility in environmental media | No data available.                                                                            |                                                           |

## 13. Disposal Considerations

|                                              |                                                                                                                                                                                                                                                               |
|----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Waste codes</b>                           | D001: Waste Flammable material with a flash point <140 °F                                                                                                                                                                                                     |
| <b>Disposal instructions</b>                 | Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. |
| <b>Waste from residues / unused products</b> | Dispose of waste and residues in accordance with local authority requirements.                                                                                                                                                                                |
| <b>Contaminated packaging</b>                | Since emptied containers retain product residue, follow label warnings even after container is emptied.                                                                                                                                                       |

## 14. Transport Information

### DOT

#### Basic shipping requirements:

|                             |                                                                         |
|-----------------------------|-------------------------------------------------------------------------|
| <b>UN number</b>            | UN1950                                                                  |
| <b>Proper shipping name</b> | Aerosols                                                                |
| <b>Hazard class</b>         | 2.1                                                                     |
| <b>Packing group</b>        | -                                                                       |
| <b>Special precautions</b>  | Read safety instructions, SDS and emergency procedures before handling. |

#### Additional information:

|                             |      |
|-----------------------------|------|
| <b>Packaging exceptions</b> | 306  |
| <b>Packaging non bulk</b>   | None |
| <b>Packaging bulk</b>       | None |

### IATA

|                                     |                                                                          |
|-------------------------------------|--------------------------------------------------------------------------|
| <b>UN number</b>                    | UN1950                                                                   |
| <b>UN proper shipping name</b>      | Aerosols                                                                 |
| <b>Transport hazard class(es)</b>   | 2.1                                                                      |
| <b>Packing group</b>                | -                                                                        |
| <b>Labels required</b>              | 2.1                                                                      |
| <b>ERG code</b>                     | 10L                                                                      |
| <b>Special precautions for user</b> | Read safety instructions, MSDS and emergency procedures before handling. |

### IMDG

|                                   |          |
|-----------------------------------|----------|
| <b>UN number</b>                  | UN1950   |
| <b>UN proper shipping name</b>    | AEROSOLS |
| <b>Transport hazard class(es)</b> | 2.1      |
| <b>Packing group</b>              | -        |
| <b>Labels required</b>            | 2.1      |

### TDG

|                             |          |
|-----------------------------|----------|
| <b>Proper shipping name</b> | AEROSOLS |
| <b>Hazard class</b>         | 2.1      |

|                           |        |
|---------------------------|--------|
| <b>UN number</b>          | UN1950 |
| <b>Packing group</b>      | -      |
| <b>Marine pollutant</b>   | D      |
| <b>Special provisions</b> | 80     |
| <b>Labels required</b>    | 2.1    |

## 15. Regulatory Information

**US federal regulations** This product is hazardous according to OSHA 29 CFR 1910.1200.  
All components are on the U.S. EPA TSCA Inventory List.

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

4-Chloro-.alpha.,.alpha.,.alpha.-trifluorotoluene (CAS 98-56-6) 1.0 % One-Time Export Notification only.

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

Chromium (CAS 7440-47-3)  
Ethylbenzene (CAS 100-41-4)  
Nickel (CAS 7440-02-0)

### US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration

Chromium (CAS 7440-47-3) 1.0 %  
Ethylbenzene (CAS 100-41-4) 0.1 %  
Nickel (CAS 7440-02-0) 0.1 %

### US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

Chromium (CAS 7440-47-3) Listed.  
Ethylbenzene (CAS 100-41-4) Listed.  
Nickel (CAS 7440-02-0) Listed.

### CERCLA (Superfund) reportable quantity (lbs) (40 CFR 302.4)

Propane: 100  
Acetone: 5000  
Butane: 100  
Chromium: 5000  
Nickel: 100  
Ethylbenzene: 1000

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories** Immediate Hazard - Yes  
Delayed Hazard - Yes  
Fire Hazard - Yes  
Pressure Hazard - Yes  
Reactivity Hazard - No

**Section 302 extremely hazardous substance (40 CFR 355, Appendix A)** No

**Section 311/312 (40 CFR 370)** Yes

**Drug Enforcement Administration (DEA) (21 CFR 1308.11-15)** Not controlled

**Canadian regulations** This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

**WHMIS status** Controlled

**WHMIS classification** B2 - Flammable Liquids  
D1A - Immediate/Serious-VERY TOXIC  
D2A - Other Toxic Effects-VERY TOXIC  
D2B - Other Toxic Effects-TOXIC

### WHMIS labeling



**Inventory status**

| 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) | Yes                    |
| 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 this product complies with the inventory requirements administered by the governing country(s)

**State regulations**

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

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

|                                                             |         |
|-------------------------------------------------------------|---------|
| Acetone (CAS 67-64-1)                                       | Listed. |
| Butane (CAS 106-97-8)                                       | Listed. |
| Chromium (CAS 7440-47-3)                                    | Listed. |
| Ethylbenzene (CAS 100-41-4)                                 | Listed. |
| Nickel (CAS 7440-02-0)                                      | Listed. |
| Solvent naphtha (petroleum), medium aliph. (CAS 64742-88-7) | Listed. |
| Stoddard solvent (CAS 8052-41-3)                            | Listed. |

**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

|                             |         |
|-----------------------------|---------|
| Ethylbenzene (CAS 100-41-4) | Listed. |
| Nickel (CAS 7440-02-0)      | Listed. |
| Quartz (CAS 14808-60-7)     | Listed. |

**US - California Proposition 65 - CRT: Listed date/Carcinogenic substance**

|                             |                                       |
|-----------------------------|---------------------------------------|
| Ethylbenzene (CAS 100-41-4) | Listed: June 11, 2004 Carcinogenic.   |
| Nickel (CAS 7440-02-0)      | Listed: October 1, 1989 Carcinogenic. |
| Quartz (CAS 14808-60-7)     | Listed: October 1, 1988 Carcinogenic. |

**US - New Jersey RTK - Substances: Listed substance**

|                                                                 |         |
|-----------------------------------------------------------------|---------|
| 4-Chloro-.alpha.,.alpha.,.alpha.-trifluorotoluene (CAS 98-56-6) | Listed. |
| Acetone (CAS 67-64-1)                                           | Listed. |
| Butane (CAS 106-97-8)                                           | Listed. |
| Chromium (CAS 7440-47-3)                                        | Listed. |
| Ethylbenzene (CAS 100-41-4)                                     | Listed. |
| Nickel (CAS 7440-02-0)                                          | Listed. |
| Propane (CAS 74-98-6)                                           | Listed. |
| Quartz (CAS 14808-60-7)                                         | Listed. |
| Stoddard solvent (CAS 8052-41-3)                                | Listed. |

**US - Pennsylvania RTK - Hazardous Substances: All compounds of this substance are considered environmental hazards**

|                          |        |
|--------------------------|--------|
| Chromium (CAS 7440-47-3) | LISTED |
| Nickel (CAS 7440-02-0)   | LISTED |

**US - Pennsylvania RTK - Hazardous Substances: Special hazard**

|                          |                 |
|--------------------------|-----------------|
| Chromium (CAS 7440-47-3) | Special hazard. |
| Nickel (CAS 7440-02-0)   | Special hazard. |

**US. Massachusetts RTK - Substance List**

|                                                               |         |
|---------------------------------------------------------------|---------|
| Acetone (CAS 67-64-1)                                         | Listed. |
| Butane (CAS 106-97-8)                                         | Listed. |
| Chromium (CAS 7440-47-3)                                      | Listed. |
| Distillates, (petroleum), hydrotreated light (CAS 64742-47-8) | Listed. |
| Ethylbenzene (CAS 100-41-4)                                   | Listed. |

|                                                             |         |
|-------------------------------------------------------------|---------|
| Nickel (CAS 7440-02-0)                                      | Listed. |
| Propane (CAS 74-98-6)                                       | Listed. |
| Quartz (CAS 14808-60-7)                                     | Listed. |
| Solvent naphtha (petroleum), medium aliph. (CAS 64742-88-7) | Listed. |
| Stoddard solvent (CAS 8052-41-3)                            | Listed. |

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

|                                                               |           |
|---------------------------------------------------------------|-----------|
| Butane (CAS 106-97-8)                                         | 500 LBS   |
| Chromium (CAS 7440-47-3)                                      | 500 LBS   |
| Distillates, (petroleum), hydrotreated light (CAS 64742-47-8) | 10000 LBS |
| Ethylbenzene (CAS 100-41-4)                                   | 500 LBS   |
| Nickel (CAS 7440-02-0)                                        | 500 LBS   |
| Propane (CAS 74-98-6)                                         | 500 LBS   |

#### **US. Pennsylvania RTK - Hazardous Substances**

|                                                               |         |
|---------------------------------------------------------------|---------|
| Acetone (CAS 67-64-1)                                         | Listed. |
| Butane (CAS 106-97-8)                                         | Listed. |
| Chromium (CAS 7440-47-3)                                      | Listed. |
| Distillates, (petroleum), hydrotreated light (CAS 64742-47-8) | Listed. |
| Ethylbenzene (CAS 100-41-4)                                   | Listed. |
| Nickel (CAS 7440-02-0)                                        | Listed. |
| Propane (CAS 74-98-6)                                         | Listed. |
| Quartz (CAS 14808-60-7)                                       | Listed. |
| Solvent naphtha (petroleum), medium aliph. (CAS 64742-88-7)   | Listed. |
| Stoddard solvent (CAS 8052-41-3)                              | Listed. |

## **16. Other Information**

### **HMIS® ratings**

Health: 3\*  
Flammability: 4  
Physical hazard: 0

### **NFPA ratings**

Health: 3  
Flammability: 4  
Instability: 0

### **Disclaimer**

The information in the sheet was written based on the best knowledge and experience currently available.