

# SAFETY DATA SHEET

## 1. Identification

**Product number** 1000035640  
**Product identifier** 13 OZ BRAMEC COLD ZINC GALVANIZE LB 12PK  
**Company information** Bramec Corporation  
403 Hwy 105  
North Sioux City, SD 57049 United States  
**Company phone** General Assistance 1-605-232-4311  
**Emergency telephone US** 1-866-836-8855  
**Emergency telephone outside US** 1-952-852-4646  
**Version #** 01  
**Recommended use** COATING  
**Recommended restrictions** None known.

## 2. Hazard(s) identification

**Physical hazards** Flammable aerosols Category 1  
**Health hazards** Skin corrosion/irritation Category 2  
Serious eye damage/eye irritation Category 2A  
Reproductive toxicity (the unborn child) Category 2  
Specific target organ toxicity, single exposure Category 3 narcotic effects  
Specific target organ toxicity, repeated exposure Category 2  
Aspiration hazard Category 1  
**OSHA defined hazards** Not classified.

### Label elements



### Signal word

Danger

### Hazard statement

Extremely flammable aerosol. May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. Suspected of damaging the unborn child. May cause damage to organs through prolonged or repeated exposure.

### Precautionary statement

#### Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Do not breathe gas. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.

#### Response

If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. If on skin: Wash with plenty of water. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention. Call a poison center/doctor if you feel unwell. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

#### Storage

Store in a well-ventilated place. Keep container tightly closed. Store locked up. 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 2

Hazardous to the aquatic environment,  
long-term hazard

Category 2

**Hazard(s) not otherwise  
classified (HNOC)**

None known.

**Supplemental information**

None.

### 3. Composition/information on ingredients

#### Mixtures

| Chemical name                            | Common name and synonyms | CAS number | %          |
|--|--------------------------|------------|------------|
| Butane                                   |                          | 106-97-8   | 20 - 40    |
| Toluene                                  |                          | 108-88-3   | 20 - 40    |
| Methyl Acetate                           |                          | 79-20-9    | 10 - 20    |
| Propane                                  |                          | 74-98-6    | 10 - 20    |
| Zinc (metallic)                          |                          | 7440-66-6  | 10 - 20    |
| Mineral Spirits                          |                          | 8052-41-3  | 0.1 - 1    |
| Zinc Oxide                               |                          | 1314-13-2  | 0.1 - 1    |
| Cadmium                                  |                          | 7440-43-9  | 0.01 - 0.1 |
| Other components below reportable levels |                          |            | 2.5 - 10   |

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

### 4. First-aid measures

**Inhalation**

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

**Skin contact**

Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

**Eye contact**

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

**Ingestion**

Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

**Most important  
symptoms/effects, acute and  
delayed**

Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. Prolonged exposure may cause chronic effects.

**Indication of immediate  
medical attention and special  
treatment needed**

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

**General information**

IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

### 5. Fire-fighting measures

**Suitable extinguishing media**

Foam. Powder. Dry sand. Carbon dioxide (CO<sub>2</sub>).

**Unsuitable extinguishing  
media**

Water.

**Specific hazards arising from  
the chemical**

Contents under pressure. Pressurized container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.

**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**

Use standard firefighting procedures and consider the hazards of other involved materials. 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 measures

### Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe 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. 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. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. 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. Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and storage

### Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. 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. Do not breathe gas. Avoid contact with eyes, skin, and clothing. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

### Conditions for safe storage, including any incompatibilities

Level 3 Aerosol.

Store locked up. 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

### Occupational exposure limits

#### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

| Components              | Type | Value                   |
|-------------------------|------|-------------------------|
| Cadmium (CAS 7440-43-9) | TWA  | 0.005 mg/m <sup>3</sup> |

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

| Components                      | Type | Value                  | Form                 |
|---------------------------------|------|------------------------|----------------------|
| Methyl Acetate (CAS 79-20-9)    | PEL  | 610 mg/m <sup>3</sup>  |                      |
| Mineral Spirits (CAS 8052-41-3) | PEL  | 200 ppm                |                      |
|                                 |      | 2900 mg/m <sup>3</sup> |                      |
| Propane (CAS 74-98-6)           | PEL  | 500 ppm                |                      |
|                                 |      | 1800 mg/m <sup>3</sup> |                      |
| Zinc Oxide (CAS 1314-13-2)      | PEL  | 1000 ppm               |                      |
|                                 |      | 5 mg/m <sup>3</sup>    | Respirable fraction. |
|                                 |      | 5 mg/m <sup>3</sup>    | Fume.                |
|                                 |      | 15 mg/m <sup>3</sup>   | Total dust.          |

#### US. OSHA Table Z-2 (29 CFR 1910.1000)

| Components              | Type    | Value                 | Form  |
|-------------------------|---------|-----------------------|-------|
| Cadmium (CAS 7440-43-9) | Ceiling | 0.6 mg/m <sup>3</sup> | Dust. |
|                         |         | 0.3 mg/m <sup>3</sup> | Fume. |

**US. OSHA Table Z-2 (29 CFR 1910.1000)**

| Components             | Type    | Value     | Form  |
|------------------------|---------|-----------|-------|
| Toluene (CAS 108-88-3) | TWA     | 0.2 mg/m3 | Dust. |
|                        |         | 0.1 mg/m3 | Fume. |
|                        | Ceiling | 300 ppm   |       |
|                        | TWA     | 200 ppm   |       |

**US. ACGIH Threshold Limit Values**

| Components                      | Type | Value       | Form                 |
|---------------------------------|------|-------------|----------------------|
| Butane (CAS 106-97-8)           | STEL | 1000 ppm    |                      |
| Cadmium (CAS 7440-43-9)         | TWA  | 0.01 mg/m3  |                      |
|                                 |      | 0.002 mg/m3 | Respirable fraction. |
| Methyl Acetate (CAS 79-20-9)    | STEL | 250 ppm     |                      |
|                                 | TWA  | 200 ppm     |                      |
| Mineral Spirits (CAS 8052-41-3) | TWA  | 100 ppm     |                      |
|                                 |      |             |                      |
| Toluene (CAS 108-88-3)          | TWA  | 20 ppm      |                      |
| Zinc Oxide (CAS 1314-13-2)      | STEL | 10 mg/m3    | Respirable fraction. |
|                                 | TWA  | 2 mg/m3     | Respirable fraction. |

**US. NIOSH: Pocket Guide to Chemical Hazards**

| Components                      | Type    | Value      | Form  |
|---------------------------------|---------|------------|-------|
| Butane (CAS 106-97-8)           | TWA     | 1900 mg/m3 |       |
|                                 |         | 800 ppm    |       |
| Methyl Acetate (CAS 79-20-9)    | STEL    | 760 mg/m3  |       |
|                                 |         | 250 ppm    |       |
|                                 | TWA     | 610 mg/m3  |       |
|                                 |         | 200 ppm    |       |
| Mineral Spirits (CAS 8052-41-3) | Ceiling | 1800 mg/m3 |       |
|                                 |         |            |       |
| Propane (CAS 74-98-6)           | TWA     | 350 mg/m3  |       |
|                                 | TWA     | 1800 mg/m3 |       |
| Toluene (CAS 108-88-3)          |         | 1000 ppm   |       |
|                                 | STEL    | 560 mg/m3  |       |
|                                 |         | 150 ppm    |       |
|                                 | TWA     | 375 mg/m3  |       |
| Zinc Oxide (CAS 1314-13-2)      |         | 100 ppm    |       |
|                                 | Ceiling | 15 mg/m3   | Dust. |
|                                 | STEL    | 10 mg/m3   | Fume. |
|                                 | TWA     | 5 mg/m3    | Dust. |
|                                 |         | 5 mg/m3    | Fume. |

**Biological limit values**

**ACGIH Biological Exposure Indices**

| Components              | Value     | Determinant               | Specimen            | Sampling Time |
|-------------------------|-----------|---------------------------|---------------------|---------------|
| Cadmium (CAS 7440-43-9) | 5 µg/g    | Cadmium                   | Creatinine in urine | *             |
|                         | 5 µg/l    | Cadmium                   | Blood               | *             |
| Toluene (CAS 108-88-3)  | 0.3 mg/g  | o-Cresol, with hydrolysis | Creatinine in urine | *             |
|                         | 0.03 mg/l | Toluene                   | Urine               | *             |
|                         | 0.02 mg/l | Toluene                   | Blood               | *             |

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

## Exposure guidelines

### US - California OELs: Skin designation

Toluene (CAS 108-88-3)

Can be absorbed through the skin.

### US - Minnesota Haz Subs: Skin designation applies

Toluene (CAS 108-88-3)

Skin designation applies.

## Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

## Individual protection measures, such as personal protective equipment

### Eye/face protection

Wear safety glasses with side shields (or goggles).

### Skin protection

#### Hand protection

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

#### Other

Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

### 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

Observe any medical surveillance requirements. When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

### Appearance

#### Physical state

Gas.

#### Form

Aerosol.

#### Color

Not available.

#### Odor

Not available.

#### Odor threshold

Not available.

#### pH

Not available.

#### Melting point/freezing point

Not available.

#### Initial boiling point and boiling range

190.35 °F (87.97 °C) estimated

#### Flash point

-156.0 °F (-104.4 °C) PROPELLANT estimated

#### Evaporation rate

Not available.

#### Flammability (solid, gas)

Not available.

### Upper/lower flammability or explosive limits

#### Flammability limit - lower (%)

2 % estimated

#### Flammability limit - upper (%)

10.9 % estimated

#### Explosive limit - lower (%)

Not available.

#### Explosive limit - upper (%)

Not available.

#### Vapor pressure

50 psig @70F estimated

#### Vapor density

Not available.

#### Relative density

Not available.

#### Solubility(ies)

##### Solubility (water)

Not available.

#### Partition coefficient (n-octanol/water)

Not available.

#### Auto-ignition temperature

Not available.

#### Decomposition temperature

Not available.

|                             |                 |
|-----------------------------|-----------------|
| <b>Viscosity</b>            | Not available.  |
| <b>Other information</b>    |                 |
| <b>Explosive properties</b> | Not explosive.  |
| <b>Oxidizing properties</b> | Not oxidizing.  |
| <b>Specific gravity</b>     | 0.807 estimated |

## 10. Stability and reactivity

|   |   |
|---|---|
| <b>Reactivity</b>                         | The product is stable and non-reactive under normal conditions of use, storage and transport. |
| <b>Chemical stability</b>                 | Material is stable under normal conditions.   |
| <b>Possibility of hazardous reactions</b> | Hazardous polymerization does not occur.  |
| <b>Conditions to avoid</b>                | Avoid temperatures exceeding the flash point. Contact with incompatible materials.            |
| <b>Incompatible materials</b>             | Strong oxidizing agents. Nitrates. Fluorine. Chlorine.  |
| <b>Hazardous decomposition products</b>   | No hazardous decomposition products are known.  |

## 11. Toxicological information

### Information on likely routes of exposure

|                     |  |
|---------------------|--|
| <b>Inhalation</b>   | May cause damage to organs through prolonged or repeated exposure by inhalation. May cause drowsiness and dizziness. Headache. Nausea, vomiting. |
| <b>Skin contact</b> | Causes skin irritation.  |
| <b>Eye contact</b>  | Causes serious eye irritation.   |
| <b>Ingestion</b>    | Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.                           |

|   |  |
|---|--|
| <b>Symptoms related to the physical, chemical and toxicological characteristics</b> | Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. |
|---|--|

### Information on toxicological effects

|                       |   |
|-----------------------|---|
| <b>Acute toxicity</b> | May be fatal if swallowed and enters airways. Narcotic effects. |
|-----------------------|---|

| Components              | Species    | Test Results             |
|-------------------------|------------|--------------------------|
| Butane (CAS 106-97-8)   |            |                          |
| <b>Acute</b>            |            |                          |
| <b>Inhalation</b>       |            |                          |
| LC50                    | Mouse      | 1237 mg/l, 120 Minutes   |
|                         |            | 52 %, 120 Minutes        |
|                         | Rat        | 1355 mg/l                |
| Cadmium (CAS 7440-43-9) |            |                          |
| <b>Acute</b>            |            |                          |
| <b>Inhalation</b>       |            |                          |
| LC50                    | Mouse      | > 9.02 mg/m3, 15 Minutes |
| <i>Vapor</i>            |            |                          |
| LC50                    | Mouse, Rat | > 1 mg/m3, 3 Hours       |
| LC50                    | Rabbit     | > 22.4 mg/m3, 15 Minutes |
| <i>Aerosol</i>          |            |                          |
| LC50                    | Rabbit     | > 4.5 mg/m3, 2 Hours     |
|                         | Rat        | > 8.63 mg/m3, 30 Minutes |
|                         |            | > 4.6 mg/m3, 3 Hours     |
|                         |            | > 4.5 mg/m3, 2 Hours     |
| <b>Oral</b>             |            |                          |
| LD50                    | Mouse      | 63 mg/kg                 |
|                         | Rat        | 63 - 259 mg/kg           |

| Components                      | Species | Test Results                                   |
|---------------------------------|---------|--|
| Methyl Acetate (CAS 79-20-9)    |         |  |
| <b><u>Acute</u></b>             |         |  |
| <b>Dermal</b>                   |         |  |
| LD50                            | Rat     | > 2000 mg/kg, 24 Hours                         |
| <b>Inhalation</b>               |         |  |
| LC100                           | Rabbit  | 98.4 mg/l, 4 Hours                             |
| <b>Oral</b>                     |         |  |
| LD50                            | Rat     | 6482 mg/kg                                     |
| Propane (CAS 74-98-6)           |         |  |
| <b><u>Acute</u></b>             |         |  |
| <b>Inhalation</b>               |         |  |
| LC50                            | Mouse   | 1237 mg/l, 120 Minutes<br>52 %, 120 Minutes    |
|                                 | Rat     | 1355 mg/l<br>658 mg/l/4h                       |
| Toluene (CAS 108-88-3)          |         |  |
| <b><u>Acute</u></b>             |         |  |
| <b>Dermal</b>                   |         |  |
| LD50                            | Rabbit  | > 5000 mg/kg, 24 Hours                         |
| <b>Inhalation</b>               |         |  |
| LC50                            | Mouse   | 6405 - 7436 ppm, 6 Hours<br>5320 ppm, 8 Hours  |
|                                 | Rat     | 5879 - 6281 ppm, 6 Hours<br>25.7 mg/l, 4 Hours |
| <b>Oral</b>                     |         |  |
| LD50                            | Rat     | > 5000 mg/kg                                   |
| Zinc (metallic) (CAS 7440-66-6) |         |  |
| <b><u>Acute</u></b>             |         |  |
| <b>Inhalation</b>               |         |  |
| LC50                            | Rat     | > 5410 mg/m3                                   |
| <b>Oral</b>                     |         |  |
| LD50                            | Rat     | > 2000 mg/kg                                   |
| Zinc Oxide (CAS 1314-13-2)      |         |  |
| <b><u>Acute</u></b>             |         |  |
| <b>Dermal</b>                   |         |  |
| LD50                            | Rat     | > 2000 mg/kg, 24 Hours                         |
| <b>Inhalation</b>               |         |  |
| LC50                            | Rat     | > 5700 mg/m3                                   |
| <b>Oral</b>                     |         |  |
| LD50                            | Mouse   | 2000 - 5000 mg/kg                              |
|                                 | Rat     | > 5000 mg/kg                                   |

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

|  |   |
|--|---|
| <b>Skin corrosion/irritation</b>         | Causes skin irritation.                                   |
| <b>Serious eye damage/eye irritation</b> | Causes serious eye irritation.                            |
| <b>Respiratory or skin sensitization</b> |   |
| <b>Respiratory sensitization</b>         | Not a respiratory sensitizer.                             |
| <b>Skin sensitization</b>                | This product is not expected to cause skin sensitization. |

**Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity** Risk of cancer cannot be excluded with prolonged exposure.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

Cadmium (CAS 7440-43-9) If <1L: Consumer Commodity Carcinogenic to humans.

Toluene (CAS 108-88-3) 3 Not classifiable as to carcinogenicity to humans.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Cadmium (CAS 7440-43-9) Cancer

**US. National Toxicology Program (NTP) Report on Carcinogens**

Cadmium (CAS 7440-43-9) Known To Be Human Carcinogen.

**Reproductive toxicity** Suspected of damaging the unborn child.

**Specific target organ toxicity - single exposure** May cause drowsiness and dizziness.

**Specific target organ toxicity - repeated exposure** May cause damage to organs through prolonged or repeated exposure.

**Aspiration hazard** May be fatal if swallowed and enters airways.

**Chronic effects** May cause damage to organs through prolonged or repeated exposure. Prolonged exposure may cause chronic effects.

## 12. Ecological information

**Ecotoxicity** Toxic to aquatic life with long lasting effects.

| Components                      |      | Species   | Test Results                   |
|---------------------------------|------|---|--------------------------------|
| Cadmium (CAS 7440-43-9)         |      |   |                                |
| <b>Aquatic</b>                  |      |   |                                |
| Crustacea                       | EC50 | Water flea (Daphnia magna)                          | 0.0491 mg/l, 48 hours          |
| Fish                            | LC50 | Rainbow trout,donaldson trout (Oncorhynchus mykiss) | 0.0024 - 0.0029 mg/l, 96 hours |
| Methyl Acetate (CAS 79-20-9)    |      |   |                                |
| <b>Aquatic</b>                  |      |   |                                |
| Algae                           | IC50 | Algae   | 120.0001 mg/L, 72 Hours        |
| Crustacea                       | EC50 | Daphnia   | 1026.7 mg/L, 48 Hours          |
| Fish                            | LC50 | Fathead minnow (Pimephales promelas)                | 295 - 348 mg/l, 96 hours       |
| Toluene (CAS 108-88-3)          |      |   |                                |
| <b>Aquatic</b>                  |      |   |                                |
| Algae                           | IC50 | Algae   | 433.0001 mg/L, 72 Hours        |
| Crustacea                       | EC50 | Daphnia   | 7.645 mg/L, 48 Hours           |
| Fish                            | LC50 | Water flea (Daphnia magna)                          | 5.46 - 9.83 mg/l, 48 hours     |
|                                 |      | Coho salmon,silver salmon (Oncorhynchus kisutch)    | 8.11 mg/l, 96 hours            |
| Zinc (metallic) (CAS 7440-66-6) |      |   |                                |
| <b>Aquatic</b>                  |      |   |                                |
| Crustacea                       | EC50 | Water flea (Daphnia magna)                          | 2.8 mg/l, 48 hours             |
| Fish                            | LC50 | Rainbow trout,donaldson trout (Oncorhynchus mykiss) | 0.56 mg/l, 96 hours            |
| Zinc Oxide (CAS 1314-13-2)      |      |   |                                |
| <b>Aquatic</b>                  |      |   |                                |
| Fish                            | LC50 | Fathead minnow (Pimephales promelas)                | 2246 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 coefficient n-octanol / water (log Kow)**

Butane 2.89

Methyl Acetate 0.18



**Partition coefficient n-octanol / water (log Kow)**

|                 |             |
|-----------------|-------------|
| Mineral Spirits | 3.16 - 7.15 |
| Propane         | 2.36        |
| Toluene         | 2.73        |

**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****DOT**

|                                     |   |
|-------------------------------------|---|
| <b>UN number</b>                    | UN1950  |
| <b>UN proper shipping name</b>      | Aerosols, flammable, (each not exceeding 1 L capacity)  |
| <b>Transport hazard class(es)</b>   |   |
| <b>Class</b>                        | 2.1   |
| <b>Subsidiary risk</b>              | -   |
| <b>Label(s)</b>                     | 2.1   |
| <b>Packing group</b>                | Not applicable.   |
| <b>Special precautions for user</b> | Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling. |
| <b>Special provisions</b>           | N82   |
| <b>Packaging exceptions</b>         | 306   |
| <b>Packaging non bulk</b>           | None  |
| <b>Packaging bulk</b>               | None  |

This product meets the exception requirements of section 173.306 as a limited quantity and may be shipped as a limited quantity. Until 12/31/2020, the "Consumer Commodity - ORM-D" marking may still be used in place of the new limited quantity diamond mark for packages of UN 1950 Aerosols. Limited quantities require the limited quantity diamond mark on cartons after 12/31/20 and may be used now in place of the "Consumer Commodity ORM-D" marking.

**IATA**

|                                     |   |
|-------------------------------------|---|
| <b>UN number</b>                    | UN1950  |
| <b>UN proper shipping name</b>      | Aerosols, flammable   |
| <b>Transport hazard class(es)</b>   |   |
| <b>Class</b>                        | 2.1   |
| <b>Subsidiary risk</b>              | -   |
| <b>Label(s)</b>                     | 2.1   |
| <b>Packing group</b>                | Not applicable.   |
| <b>Environmental hazards</b>        | Yes   |
| <b>ERG Code</b>                     | 10L   |
| <b>Special precautions for user</b> | Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling. |
| <b>Other information</b>            |   |
| <b>Passenger and cargo aircraft</b> | Allowed with restrictions.  |
| <b>Cargo aircraft only</b>          | Allowed with restrictions.  |
| <b>Packaging Exceptions</b>         | LTD QTY   |

**IMDG**

|                  |        |
|------------------|--------|
| <b>UN number</b> | UN1950 |
|------------------|--------|

**UN proper shipping name** AEROSOLS  
**Transport hazard class(es)**  
**Class** 2.1  
**Subsidiary risk** -  
**Label(s)** None  
**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.  
**Packaging Exceptions** LTD QTY  
**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

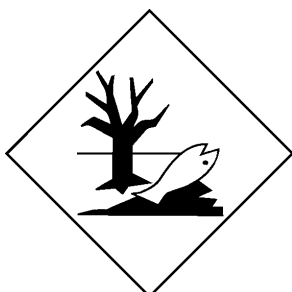
**DOT**



**IATA; IMDG**



**Marine pollutant**



**General information** DOT Regulated Marine Pollutant. IMDG Regulated Marine Pollutant.

**15. Regulatory information**

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

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

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

|                                 |         |
|---------------------------------|---------|
| Cadmium (CAS 7440-43-9)         | Listed. |
| Toluene (CAS 108-88-3)          | Listed. |
| Zinc (metallic) (CAS 7440-66-6) | Listed. |

**SARA 304 Emergency release notification**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

|                         |                |
|-------------------------|----------------|
| Cadmium (CAS 7440-43-9) | Cancer         |
|                         | Lung           |
|                         | Kidney         |
|                         | Acute toxicity |

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

|                          |                        |
|--------------------------|------------------------|
| <b>Hazard categories</b> | Immediate Hazard - Yes |
|                          | Delayed Hazard - Yes   |
|                          | Fire Hazard - Yes      |
|                          | Pressure Hazard - Yes  |
|                          | Reactivity Hazard - No |

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical** No**SARA 313 (TRI reporting)**

| Chemical name   | CAS number | % by wt.   |
|-----------------|------------|------------|
| Toluene         | 108-88-3   | 20 - 40    |
| Zinc (metallic) | 7440-66-6  | 10 - 20    |
| Cadmium         | 7440-43-9  | 0.01 - 0.1 |

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Cadmium (CAS 7440-43-9)  
Toluene (CAS 108-88-3)

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

Butane (CAS 106-97-8)  
Propane (CAS 74-98-6)

**Safe Drinking Water Act (SDWA)** Not regulated.**Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number**

Toluene (CAS 108-88-3) 6594

**Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))**

Toluene (CAS 108-88-3) 35 %WV

**DEA Exempt Chemical Mixtures Code Number**

Toluene (CAS 108-88-3) 594

**US state regulations****US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)**

Not listed.

**US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**

Butane (CAS 106-97-8)  
Cadmium (CAS 7440-43-9)  
Mineral Spirits (CAS 8052-41-3)  
Toluene (CAS 108-88-3)  
Zinc (metallic) (CAS 7440-66-6)

**US. Massachusetts RTK - Substance List**

Butane (CAS 106-97-8)  
Cadmium (CAS 7440-43-9)  
Methyl Acetate (CAS 79-20-9)  
Mineral Spirits (CAS 8052-41-3)  
Propane (CAS 74-98-6)  
Toluene (CAS 108-88-3)  
Zinc (metallic) (CAS 7440-66-6)  
Zinc Oxide (CAS 1314-13-2)

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

Butane (CAS 106-97-8)

Cadmium (CAS 7440-43-9)  
 Methyl Acetate (CAS 79-20-9)  
 Propane (CAS 74-98-6)  
 Toluene (CAS 108-88-3)  
 Zinc (metallic) (CAS 7440-66-6)  
 Zinc Oxide (CAS 1314-13-2)

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

Butane (CAS 106-97-8)  
 Cadmium (CAS 7440-43-9)  
 Methyl Acetate (CAS 79-20-9)  
 Mineral Spirits (CAS 8052-41-3)  
 Propane (CAS 74-98-6)  
 Toluene (CAS 108-88-3)  
 Zinc (metallic) (CAS 7440-66-6)  
 Zinc Oxide (CAS 1314-13-2)

**US. Rhode Island RTK**

Butane (CAS 106-97-8)  
 Cadmium (CAS 7440-43-9)  
 Propane (CAS 74-98-6)  
 Toluene (CAS 108-88-3)  
 Zinc (metallic) (CAS 7440-66-6)

**US. California Proposition 65**

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

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

|                            |                         |
|----------------------------|-------------------------|
| Acetaldehyde (CAS 75-07-0) | Listed: April 1, 1988   |
| Cadmium (CAS 7440-43-9)    | Listed: October 1, 1987 |
| Lead (CAS 7439-92-1)       | Listed: October 1, 1992 |

**US - California Proposition 65 - CRT: Listed date/Developmental toxin**

|                         |                           |
|-------------------------|---------------------------|
| Cadmium (CAS 7440-43-9) | Listed: May 1, 1997       |
| Lead (CAS 7439-92-1)    | Listed: February 27, 1987 |
| Methanol (CAS 67-56-1)  | Listed: March 16, 2012    |
| Toluene (CAS 108-88-3)  | Listed: January 1, 1991   |

**US - California Proposition 65 - CRT: Listed date/Female reproductive toxin**

|                      |                           |
|----------------------|---------------------------|
| Lead (CAS 7439-92-1) | Listed: February 27, 1987 |
|----------------------|---------------------------|

**US - California Proposition 65 - CRT: Listed date/Male reproductive toxin**

|                         |                           |
|-------------------------|---------------------------|
| Cadmium (CAS 7440-43-9) | Listed: May 1, 1997       |
| Lead (CAS 7439-92-1)    | Listed: February 27, 1987 |

**International Inventories**

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

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)  
 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, including date of preparation or last revision**

Issue date 05-01-2017

**Version #**

01

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**Revision information**

Product and Company Identification: Alternate Trade Names