



## SAFETY DATA SHEET

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200.

### Section 1: Product and Company Identification

|                         |   |
|-------------------------|---|
| Product Name:           | <b>Radnor Cold Galv Matte Finish (Aerosol)</b>                        |
| Product Identifier:     | Zinc Primer   |
| Product Use:            | Galvanizing Repair  |
| Item Code(s):           | 64000130  |
| SDS Code:               | 008R  |
| Supplier:               | Radnor  |
| Physical Address:       | 259 North Radnor - Chester Road - Suite 100<br>Radnor, PA, 19087-5283 |
| Emergency Phone:        | 866-734-3438  |
| Date of Preparation:    | May 11, 2015 (Revised September 26, 2018)                             |
| OSHA Regulatory Status: | Regulated   |
| WHMIS Classification:   | B5, D2A   |

### Section 2: Hazard Identification

#### Physical Hazards

|  |                             |
|--|-----------------------------|
| Flammable aerosols                                     | Category 1                  |
| Gases under pressure                                   | Liquefied Gas               |
| <b>Health Hazards</b>                                  |                             |
| Acute toxicity, oral                                   | Category 4                  |
| Skin corrosion/irritation                              | Category 2                  |
| Serious eye damage / eye irritation                    | Category 2A                 |
| Carcinogenicity  | Category 2                  |
| Reproductive toxicity                                  | Category 2                  |
| Specific target organ toxicity, single exposure        | Category 3 narcotic effects |
| Specific target organ toxicity, repeated exposure      | Category 1                  |
| <b>Environmental Hazards</b>                           |                             |
| Hazardous to the aquatic environment, acute hazard     | Category 1                  |
| Hazardous to the aquatic environment, long-term hazard | Category 1                  |
| <b>OSHA Defined Hazards</b>                            |                             |
| Not Classified   |                             |

#### GHS Label elements, including precautionary statements



Appearance:

Physical State: Aerosol, Liquid Gas

Odor:

## Emergency Overview

### DANGER

#### Hazard Statements

|      |  |
|------|--|
| H222 | Extremely flammable aerosol                                    |
| H280 | Contains gas under pressure; may explode if heated             |
| H302 | Harmful if swallowed   |
| H315 | Causes skin irritation   |
| H319 | Causes serious eye irritation                                  |
| H336 | May cause drowsiness or dizziness                              |
| H350 | May cause cancer   |
| H360 | May damage fertility or the unborn child                       |
| H372 | Causes damage to organs through prolonged or repeated exposure |
| H410 | Very toxic to aquatic life with long lasting effects           |

#### Precautionary Statements - Prevention

|      |   |
|------|---|
| P201 | Obtain special instructions before use                                    |
| P202 | Do not handle until all safety precautions have been read and understood  |
| P210 | Keep away from heat/sparks/open flames/hot surfaces. — No smoking         |
| P211 | Do not spray on an open flame or other ignition source                    |
| P251 | Pressurized container: Do not pierce or burn, even after use              |
| P260 | Do not breathe mist or vapor  |
| P264 | Wash thoroughly after handling  |
| P270 | Do not eat, drink or smoke when using this product                        |
| P271 | Use only outdoors or in a well ventilated area                            |
| P273 | Avoid release to the environment  |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection |

#### Precautionary Statements - Response

|                          |  |
|--------------------------|--|
| P301 +<br>P312           | IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  |
| P302 +<br>P352           | IF ON SKIN: Wash with plenty of soap and water   |
| P304 +<br>P340           | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing                                  |
| P305 +<br>P351 +<br>P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P308 +<br>P313           | IF exposed or concerned: Get medical advice/attention  |
| P312                     | Call a POISON CENTER or doctor/physician if you feel unwell  |
| P330                     | Rinse mouth  |
| P332 +<br>P313           | IF SKIN irritation occurs: Get medical advice/attention  |
| P337 +<br>P313           | IF EYE irritation persists: Get medical advice/attention   |
| P362                     | Take off contaminated clothing and wash before reuse   |
| P391                     | Collect spillage. Hazardous to the aquatic environment   |

#### Precautionary Statements - Storage

|                |   |
|----------------|---|
| P403 +<br>P233 | Store in a well-ventilated place. Keep container tightly closed             |
| P405           | Store locked up   |
| P410 +<br>P412 | Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F |

#### Precautionary Statements - Disposal

|      |  |
|------|--|
| P501 | Dispose of contents/container in accordance with local/regional/national/international regulations |
|------|--|

HAZARDS NOT OTHERWISE CLASSIFIED (HNOC): None

**OTHER INFORMATION:**

- 20.07% of the mixture consists of component(s) of unknown acute oral toxicity.
- 35.92% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment.
- 35.92% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

---

**Section 3: Composition and Information on Ingredients**

---

| CHEMICAL NAME                            | CAS #     | %         |
|--|-----------|-----------|
| ZINC                                     | 7440-66-6 | 30 to <40 |
| ACETONE                                  | 67-64-1   | 10 to <20 |
| METHYL ETHYL KETONE                      | 78-93-3   | 10 to <20 |
| PROPANE                                  | 74-98-6   | 10 to <20 |
| XYLENE                                   | 1330-20-7 | 10 to <20 |
| N-BUTANE                                 | 106-97-8  | 5 to <10  |
| DIACETONE ALCOHOL                        | 123-42-2  | 1 to <5   |
| ETHYLBENZENE                             | 100-41-4  | 1 to <5   |
| ZINC OXIDE                               | 1314-13-2 | 0.1 to <1 |
| Other components below reportable levels |           | 1 to <5   |

---

**Section 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:** No adverse effects due to skin contact are expected. 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. No specific first aid measures noted.

**INGESTION:** Not likely, due to the form of the product. Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell.

**MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE AND DELAYED:** 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 warm. 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.

---

## **Section 5: Fire Fighting Measures**

---

**SUITABLE EXTINGUISHING MEDIA:** Alcohol resistant foam. Water fog. Dry chemical powder. Dry sand. Carbon dioxide (CO<sub>2</sub>).

**UNSUITABLE EXTINGUISHING MEDIA:** Do not use water jet as an extinguisher, as this will spread the fire.

**SPECIFIC HAZARDS ARISING FROM THE CHEMICAL:** Contents under pressure. Pressurized container may explode when exposed to heat or flame. 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:** In case of fire: Stop leak if safe to do so. Do not move cargo or vehicle if cargo has been exposed to heat. 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 fire fighting 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. Contents under pressure. Pressurized container may explode when exposed to heat or flame.

---

## **Section 6: Accidental Release Measures**

---

**PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:** Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Emergency personnel need self-contained breathing equipment. 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. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. 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. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent product from entering drains. 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. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

---

## **Section 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 mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Pregnant or breast-feeding 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 2 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. Secure cylinders in an upright position at all times, close all valves when not in use. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

## Section 8: Exposure Controls / Personal Protection

### OCCUPATIONAL EXPOSURE LIMITS:

#### 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/m <sup>3</sup><br>1000 ppm                                 |  |
| DIACETONE ALCOHOL (CAS 123-42-2)  | PEL  | 240 mg/m <sup>3</sup><br>50 ppm                                    |  |
| ETHYLBENZENE (CAS 100-41-4)       | PEL  | 435 mg/m <sup>3</sup><br>100 ppm                                   |  |
| METHYL ETHYL KETONE (CAS 78-93-3) | PEL  | 590 mg/m <sup>3</sup><br>200 ppm                                   |  |
| PROPANE (CAS 74-98-6)             | PEL  | 1800 mg/m <sup>3</sup><br>1000 ppm                                 |  |
| XYLENE (CAS 1330-20-7)            | PEL  | 435 mg/m <sup>3</sup><br>100 ppm                                   |  |
| ZINC OXIDE (CAS 1314-13-2)        | PEL  | 5 mg/m <sup>3</sup><br>5 mg/m <sup>3</sup><br>15 mg/m <sup>3</sup> | Respirable fraction.<br>Fume.<br>Total dust. |

#### US. ACGIH Threshold Limit Values

| Components                        | Type        | Value                                       | Form   |
|-----------------------------------|-------------|---|--|
| ACETONE (CAS 67-64-1)             | STEL<br>TWA | 750 ppm<br>500 ppm                          |  |
| DIACETONE ALCOHOL (CAS 123-42-2)  | TWA         | 50 ppm                                      |  |
| ETHYLBENZENE (CAS 100-41-4)       | TWA         | 20 ppm                                      |  |
| METHYL ETHYL KETONE (CAS 78-93-3) | STEL<br>TWA | 300 ppm<br>200 ppm                          |  |
| N-BUTANE (CAS 106-97-8)           | STEL        | 1000 ppm                                    |  |
| XYLENE (CAS 1330-20-7)            | STEL<br>TWA | 150 ppm<br>100 ppm                          |  |
| ZINC OXIDE (CAS 1314-13-2)        | STEL<br>TWA | 10 mg/m <sup>3</sup><br>2 mg/m <sup>3</sup> | Respirable fraction.<br>Respirable fraction. |

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

| Components                        | Type                   | Value  | Form                             |
|-----------------------------------|------------------------|--|----------------------------------|
| ACETONE (CAS 67-64-1)             | TWA                    | 590 mg/m <sup>3</sup><br>250 ppm   |                                  |
| DIACETONE ALCOHOL (CAS 123-42-2)  | TWA                    | 240 mg/m <sup>3</sup><br>50 ppm  |                                  |
| ETHYLBENZENE (CAS 100-41-4)       | STEL<br>TWA            | 545 mg/m <sup>3</sup><br>125 ppm<br>435 mg/m <sup>3</sup><br>100 ppm                       |                                  |
| METHYL ETHYL KETONE (CAS 78-93-3) | STEL<br>TWA            | 885 mg/m <sup>3</sup><br>300 ppm<br>590 mg/m <sup>3</sup><br>200 ppm                       |                                  |
| N-BUTANE (CAS 106-97-8)           | TWA                    | 1900 mg/m <sup>3</sup><br>800 ppm  |                                  |
| PROPANE (CAS 74-98-6)             | TWA                    | 1800 mg/m <sup>3</sup><br>1000 ppm   |                                  |
| ZINC OXIDE (CAS 1314-13-2)        | Ceiling<br>STEL<br>TWA | 15 mg/m <sup>3</sup><br>10 mg/m <sup>3</sup><br>5 mg/m <sup>3</sup><br>5 mg/m <sup>3</sup> | Dust.<br>Fume.<br>Dust.<br>Fume. |

**BIOLOGICAL LIMIT VALUES:**

**ACGIH Biological Exposure Indices**

| <b>Components</b>                 | <b>Value</b> | <b>Determinant</b>                            | <b>Specimen</b>     | <b>Sampling Time</b> |
|-----------------------------------|--------------|---|---------------------|----------------------|
| ACETONE (CAS 67-64-1)             | 50 mg/l      | Acetone                                       | Urine               | *                    |
| ETHYLBENZENE (CAS 100-41-4)       | 0.15 g/g     | Sum of mandelic acid and phenylglyoxylic acid | Creatinine in urine | *                    |
| METHYL ETHYL KETONE (CAS 78-93-3) | 2 mg/l       | MEK   | Urine               | *                    |
| XYLENE (CAS 1330-20-7)            | 1.5 g/g      | Methylhippuric acids                          | Creatinine in urine | *                    |

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

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

**RESPIRATORY PROTECTION:** If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

**THERMAL HAZARDS:** Wear appropriate thermal protective clothing, when necessary.

**GENERAL HYGIENE CONSIDERATIONS:** When using do not smoke. Keep away from food and drink. 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.

---

## Section 9: Physical and Chemical Properties

---

### APPEARANCE:

Physical state                      Liquid.  
Form                                    Aerosol. Liquefied gas.  
Color                                  Not available.

### ODOR:

Not available.

### ODOR THRESHOLD:

Not available.

### PH:

Not available.

### MELTING POINT/FREEZING POINT:

-305.68 °F (-187.6 °C) estimated

### INITIAL BOILING POINT AND BOILING RANGE:

-43.78 °F (-42.1 °C) estimated

### FLASH POINT:

-156.0 °F (-104.4 °C) estimated

### EVAPORATION RATE:

Not available.

### FLAMMABILITY: (solid, gas)

Not applicable.

### UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS:

Flammability limit - lower (%)      1.8 % estimated

Flammability limit - upper (%)      12.8 % estimated

Explosive limit - lower (%)          Not available.

Explosive limit - upper (%)          Not available.

### VAPOR PRESSURE:

1395.63 hPa 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:

550 °F (287.78 °C) estimated

### DECOMPOSITION TEMPERATURE:

Not available.

### VISCOSITY:

Not available.

### Other information

#### DENSITY:

8.64 lbs/gal

#### FLAMMABILITY CLASS:

Flammable IA estimated

#### HEAT OF COMBUSTION (NFPA 30B):

20.94 kJ/g estimated

#### PERCENT VOLATILE:

63.96

#### SPECIFIC GRAVITY:

1.04

#### VOC:

454.867348 g/l Material

3.796052 lbs/gal Material

616.852834 g/l Regulatory

5.1478864 lbs/gal Regulatory

---

## Section 10: Stability and Reactivity

---

**REACTIVITY:** The product is stable and non-reactive under normal conditions of use, storage and transport.

**CHEMICAL STABILITY:** Material is stable under normal conditions.

**POSSIBILITY OF HAZARDOUS REACTIONS:** Hazardous polymerization does not occur.

**CONDITIONS TO AVOID:** Heat. Avoid temperatures exceeding the flash point. Contact with incompatible materials.

**INCOMPATIBLE MATERIALS:** Strong acids. Acids. Strong oxidizing agents. Nitrates. Halogens. Ammonia. Amines. Isocyanates. Fluorine. Caustics. Chlorine.

**HAZARDOUS DECOMPOSITION PRODUCTS:** No hazardous decomposition products are known.

---

## Section 11: Toxicological Information

---

### INFORMATION ON LIKELY ROUTES OF EXPOSURE:

**INHALATION:** May cause damage to organs through prolonged or repeated exposure by inhalation. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be harmful.

**SKIN CONTACT:** Causes skin irritation.

**EYE CONTACT:** Causes serious eye irritation.

**INGESTION:** Harmful if swallowed.

**SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS:** Headache. May cause drowsiness and dizziness. 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:**

**ACUTE TOXICITY:** Harmful if swallowed. Narcotic effects.

| Components                        | Species | Test Results                |
|-----------------------------------|---------|-----------------------------|
| ACETONE (CAS 67-64-1)             |         |                             |
| <b>Acute</b>                      |         |                             |
| <b>Dermal</b>                     |         |                             |
| LD50                              | Rabbit  | > 15800 mg/kg               |
| <b>Inhalation</b>                 |         |                             |
| LC50                              | Rat     | 76 mg/l, 4 Hours            |
| <b>Oral</b>                       |         |                             |
| LD50                              | Mouse   | 3000 mg/kg                  |
|                                   | Rat     | 5800 mg/kg                  |
| DIACETONE ALCOHOL (CAS 123-42-2)  |         |                             |
| <b>Acute</b>                      |         |                             |
| <b>Dermal</b>                     |         |                             |
| LD50                              | Rabbit  | 14.5 ml/kg                  |
| <b>Oral</b>                       |         |                             |
| LD50                              | Rat     | 4 g/kg                      |
| ETHYLBENZENE (CAS 100-41-4)       |         |                             |
| <b>Acute</b>                      |         |                             |
| <b>Dermal</b>                     |         |                             |
| LD50                              | Rabbit  | 17800 mg/kg                 |
| <b>Oral</b>                       |         |                             |
| LD50                              | Rat     | 3500 mg/kg                  |
| METHYL ETHYL KETONE (CAS 78-93-3) |         |                             |
| <b>Acute</b>                      |         |                             |
| <b>Dermal</b>                     |         |                             |
| LD50                              | Rabbit  | > 8000 mg/kg                |
| <b>Inhalation</b>                 |         |                             |
| LC50                              | Mouse   | 11000 ppm, 45 Minutes       |
|                                   | Rat     | 11700 ppm, 4 Hours          |
| <b>Oral</b>                       |         |                             |
| LD50                              | Mouse   | 670 mg/kg                   |
|                                   | Rat     | 2300 - 3500 mg/kg           |
| N-BUTANE (CAS 106-97-8)           |         |                             |
| <b>Acute</b>                      |         |                             |
| <b>Inhalation</b>                 |         |                             |
| LC50                              | Mouse   | 680 mg/l, 2 Hours           |
|                                   | Rat     | 658 mg/l, 4 Hours           |
| PROPANE (CAS 74-98-6)             |         |                             |
| <b>Acute</b>                      |         |                             |
| <b>Inhalation</b>                 |         |                             |
| LC50                              | Rat     | > 1442.847 mg/l, 15 Minutes |
| XYLENE (CAS 1330-20-7)            |         |                             |
| <b>Acute</b>                      |         |                             |
| <b>Dermal</b>                     |         |                             |
| LD50                              | Rabbit  | > 43 g/kg                   |
| <b>Inhalation</b>                 |         |                             |
| LC50                              | Mouse   | 3907 mg/l, 6 Hours          |
|                                   | Rat     | 6350 mg/l, 4 Hours          |
| <b>Oral</b>                       |         |                             |
| LD50                              | Mouse   | 1590 mg/kg                  |
|                                   | Rat     | 3523 - 8600 mg/kg           |
| ZINC (CAS 7440-66-6)              |         |                             |
| <b>Acute</b>                      |         |                             |
| <b>Oral</b>                       |         |                             |
| LD50                              | Rat     | 630 mg/kg                   |
| ZINC OXIDE (CAS 1314-13-2)        |         |                             |
| <b>Acute</b>                      |         |                             |
| <b>Inhalation</b>                 |         |                             |
| LC50                              | Mouse   | > 5.7 mg/l, 4 Hours         |
| <b>Oral</b>                       |         |                             |
| LD50                              | Mouse   | 7950 mg/kg                  |
|                                   | Rat     | > 5 g/kg                    |

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

**SKIN CORROSION/IRRITATION:** Causes skin irritation.

**SERIOUS EYE DAMAGE/EYE IRRITATION:** Causes serious eye irritation.

**RESPIRATORY OR SKIN SENSITIZATION:**

**RESPIRATORY SENSITIZATION:** Not a respiratory sensitizer.

**SKIN SENSITIZATION:** 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:** Suspected of causing cancer.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

ETHYLBENZENE (CAS 100-41-4) 2B Possibly carcinogenic to humans.

XYLENE (CAS 1330-20-7) 3 Not classifiable as to carcinogenicity to humans.

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

Not listed.

**REPRODUCTIVE TOXICITY:** Components in this product have been shown to cause birth defects and reproductive disorders in laboratory animals. Suspected of damaging fertility or the unborn child.

**SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE:** May cause drowsiness and dizziness.

**SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE:** Causes damage to organs through prolonged or repeated exposure.

**ASPIRATION HAZARD:** Not an aspiration hazard.

**CHRONIC EFFECTS:** Causes damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

---

## Section 12: Ecological Information

---

**ECOTOXICITY:** Very toxic to aquatic life with long lasting effects.

| Components                        |      | Species   | Test Results                 |
|-----------------------------------|------|---|------------------------------|
| ACETONE (CAS 67-64-1)             |      |   |                              |
| <b>Aquatic</b>                    |      |   |                              |
| Crustacea                         | EC50 | Water flea (Daphnia magna)                          | 21.6 - 23.9 mg/l, 48 hours   |
| Fish                              | LC50 | Rainbow trout,donaldson trout (Oncorhynchus mykiss) | 4740 - 6330 mg/l, 96 hours   |
| DIACETONE ALCOHOL (CAS 123-42-2)  |      |   |                              |
| <b>Aquatic</b>                    |      |   |                              |
| Fish                              | LC50 | Bluegill (Lepomis macrochirus)                      | 420 mg/l, 96 hours           |
| ETHYLBENZENE (CAS 100-41-4)       |      |   |                              |
| <b>Aquatic</b>                    |      |   |                              |
| Crustacea                         | EC50 | Water flea (Daphnia magna)                          | 1.37 - 4.4 mg/l, 48 hours    |
| Fish                              | LC50 | Fathead minnow (Pimephales promelas)                | 7.5 - 11 mg/l, 96 hours      |
| METHYL ETHYL KETONE (CAS 78-93-3) |      |   |                              |
| <b>Aquatic</b>                    |      |   |                              |
| Crustacea                         | EC50 | Water flea (Daphnia magna)                          | 4025 - 6440 mg/l, 48 hours   |
| Fish                              | LC50 | Sheepshead minnow (Cyprinodon variegatus)           | > 400 mg/l, 96 hours         |
| XYLENE (CAS 1330-20-7)            |      |   |                              |
| <b>Aquatic</b>                    |      |   |                              |
| Fish                              | LC50 | Bluegill (Lepomis macrochirus)                      | 7.711 - 9.591 mg/l, 96 hours |
| ZINC (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)**

|                     |            |
|---------------------|------------|
| ACETONE             | -0.24      |
| DIACETONE ALCOHOL   | -0.098     |
| ETHYLBENZENE        | 3.15       |
| METHYL ETHYL KETONE | 0.29       |
| N-BUTANE            | 2.89       |
| PROPANE             | 2.36       |
| XYLENE              | 3.12 - 3.2 |

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.

---

## **Section 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.

---

## Section 14: Transportation Information

---

### DOT

|                              |   |
|------------------------------|---|
| UN number                    | UN1950  |
| UN proper shipping name      | Aerosols, flammable, 2.1  |
| Transport hazard class(es)   |   |
| Class                        | Not available.  |
| Subsidiary risk              | -   |
| Packing group                | Not applicable.   |
| Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. |

### IATA

|                              |   |
|------------------------------|---|
| UN number                    | UN1950  |
| UN proper shipping name      | Aerosols, flammable, 2.1  |
| Transport hazard class(es)   |   |
| Class                        | Not available.  |
| Subsidiary risk              | -   |
| Packing group                | Not applicable.   |
| Environmental hazards        | No.   |
| Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. |
| Other information            |   |
| Passenger and cargo aircraft | Forbidden.  |
| Cargo aircraft only          | Forbidden.  |

### IMDG

|  |   |
|--|---|
| UN number  | UN1950  |
| UN proper shipping name  | Aerosols, flammable, 2.1  |
| Transport hazard class(es)   |   |
| Class  | Not available.  |
| Subsidiary risk  | -   |
| Packing group  | Not applicable.   |
| Environmental hazards  |   |
| Marine pollutant   | No.   |
| EmS  | Not available.  |
| Special precautions for user   | Read safety instructions, SDS and emergency procedures before handling. |
| Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | Not established.  |

---

## Section 15: Regulatory Information

---

US FEDERAL REGULATIONS: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 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)**

Not regulated.

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

|                                   |         |
|-----------------------------------|---------|
| ACETONE (CAS 67-64-1)             | Listed. |
| ETHYLBENZENE (CAS 100-41-4)       | Listed. |
| METHYL ETHYL KETONE (CAS 78-93-3) | Listed. |
| N-BUTANE (CAS 106-97-8)           | Listed. |
| PROPANE (CAS 74-98-6)             | Listed. |
| XYLENE (CAS 1330-20-7)            | Listed. |
| ZINC (CAS 7440-66-6)              | Listed. |
| ZINC OXIDE (CAS 1314-13-2)        | Listed. |

### **SARA 304 Emergency release notification**

Not regulated.

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

Not listed.

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

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

### SARA 302 Extremely hazardous substance

Not listed.

**SARA 311/312 Hazardous chemical** No

### SARA 313 (TRI reporting)

| <u>Chemical name</u> | <u>CAS number</u> | <u>% by wt.</u> |
|----------------------|-------------------|-----------------|
| ZINC                 | 7440-66-6         | 30 to <40       |
| XYLENE               | 1330-20-7         | 10 to <20       |
| ETHYLBENZENE         | 100-41-4          | 1 to <5         |
| ZINC OXIDE           | 1314-13-2         | 0.1 to <1       |

## OTHER FEDERAL REGULATIONS:

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

ETHYLBENZENE (CAS 100-41-4)

XYLENE (CAS 1330-20-7)

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

N-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**

ACETONE (CAS 67-64-1) 6532

METHYL ETHYL KETONE  
(CAS 78-93-3) 6714

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

ACETONE (CAS 67-64-1) 35 %WV

METHYL ETHYL KETONE 35 %WV  
(CAS 78-93-3)

### **DEA Exempt Chemical Mixtures Code Number**

ACETONE (CAS 67-64-1) 6532

METHYL ETHYL KETONE 6714  
(CAS 78-93-3)

## 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))**

ACETONE (CAS 67-64-1)  
ETHYLBENZENE (CAS 100-41-4)  
METHYL ETHYL KETONE (CAS 78-93-3)  
N-BUTANE (CAS 106-97-8)  
XYLENE (CAS 1330-20-7)  
ZINC (CAS 7440-66-6)

### **US. Massachusetts RTK - Substance List**

ACETONE (CAS 67-64-1)  
DIACETONE ALCOHOL (CAS 123-42-2)  
ETHYLBENZENE (CAS 100-41-4)  
METHYL ETHYL KETONE (CAS 78-93-3)  
N-BUTANE (CAS 106-97-8)  
PROPANE (CAS 74-98-6)  
XYLENE (CAS 1330-20-7)  
ZINC (CAS 7440-66-6)  
ZINC OXIDE (CAS 1314-13-2)

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

ACETONE (CAS 67-64-1)  
 DIACETONE ALCOHOL (CAS 123-42-2)  
 ETHYLBENZENE (CAS 100-41-4)  
 METHYL ETHYL KETONE (CAS 78-93-3)  
 N-BUTANE (CAS 106-97-8)  
 PROPANE (CAS 74-98-6)  
 XYLENE (CAS 1330-20-7)  
 ZINC (CAS 7440-66-6)  
 ZINC OXIDE (CAS 1314-13-2)

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

ACETONE (CAS 67-64-1)  
 DIACETONE ALCOHOL (CAS 123-42-2)  
 ETHYLBENZENE (CAS 100-41-4)  
 METHYL ETHYL KETONE (CAS 78-93-3)  
 N-BUTANE (CAS 106-97-8)  
 PROPANE (CAS 74-98-6)  
 XYLENE (CAS 1330-20-7)  
 ZINC (CAS 7440-66-6)  
 ZINC OXIDE (CAS 1314-13-2)

**US. Rhode Island RTK**

ACETONE (CAS 67-64-1)  
 ETHYLBENZENE (CAS 100-41-4)  
 METHYL ETHYL KETONE (CAS 78-93-3)  
 N-BUTANE (CAS 106-97-8)  
 PROPANE (CAS 74-98-6)  
 XYLENE (CAS 1330-20-7)  
 ZINC (CAS 7440-66-6)  
 ZINC OXIDE (CAS 1314-13-2)

**US. California Proposition 65**

WARNING: This product contains a chemical known to the State of California to cause cancer.

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

ETHYLBENZENE (CAS 100-41-4) Listed: June 11, 2004  
 SILICA, CRYSTALLINE QUARTZ (CAS 14808-60-7) Listed: October 1, 1988

**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).

---

## Section 16: Other Information

---

### HMIS® ratings

Health: 2\*  
Flammability: 4  
Physical hazard: 0

### NFPA ratings

Health: 2  
Flammability: 4  
Instability: 0

N/E

Not Established

N/Av

Not Available

N/Ap

Not Applicable

IARC

International Agency for Research on Cancer

ACGIH

American Conference of Governmental Industrial Hygienists

NIOSH

National Institute for Occupational Health and Safety

TLV-TWA

Threshold Limit, Time Weighted Average

NAERG

North American Emergency Response Guidebook

WHMIS

Workplace Hazardous Materials Information System

---

This SDS format meets ANSI Z400.1-1998, OSHA 1910.1200 and WHMIS requirements. Radnor provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Product use and conditions of use are beyond the control of Radnor. Warranty of materials is limited to test results of product performance as detailed in certificates of compliance. Interpretation of test results is the responsibility of end-user. No other warranties, expressed or implied, are made.