

#### **U.S. Department of Labor**

Occupational Safety and Health Administration (Non-Mandatory Form). Format meets ANSI Z400.1-1998, OSHA 1910.1200 and WHMIS requirements.

Category 1

Category 1

# 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: Radnor Cold Galv Matte Finish (Aerosol)

Product Identifier: Zinc Primer

Product Use: Galvanizng Repair

Item Code(s):64000130SDS Code:008RSupplier:Radnor

Physical Address: 259 North Radnor - Chester Road - Suite 100

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** 

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Flammable aerosols	Category 1
Gases under pressure	Liquefied Gas
Health Hazards	
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
Environmental Hazards	

## GHS Label elements, including precautionary statements

Hazardous to the aquatic environment, long-term hazard

Hazardous to the aquatic environment, acute hazard



OSHA Defined Hazards
Not Classified









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
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#### **Precautionary Statements - Response**

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

## **Precautionary Statements - Storage**

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

## **Precautionary Statements - Disposal**

P501 Dispose of contents/container in accordance with local/regional/national/international regulations
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#### 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**

<u>INHALATION</u>: 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.

<u>SKIN CONTACT</u>: 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.

<u>EYE CONTACT</u>: 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.

<u>INGESTION</u>: 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.

<u>INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED</u>: Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

<u>GENERAL INFORMATION</u>, <u>IF EXPOSED OR CONCERNED</u>: 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**

<u>SUITABLE EXTINGUISHING MEDIA</u>: Alcohol resistant foam. Water fog. Dry chemical powder. Dry sand. Carbon dioxide (CO2).

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

<u>SPECIFIC HAZARDS ARISING FROM THE CHEMICAL</u>: Contents under pressure. Pressurized container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.

<u>SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS</u>: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

<u>FIRE FIGHTING EQUIPMENT/INSTRUCTIONS</u>: 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.

<u>SPECIFIC METHODS</u>: 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.

<u>GENERAL FIRE HAZARDS</u>: 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.

<u>SMALL SPILLS</u>: 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.

<u>ENVIRONMENTAL PRECAUTIONS</u>: 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:**

Components	Туре	Value	Form
ACETONE (CAS 67-64-1)	PEL	2400 mg/m <sup>3</sup>	
		1000 ppm	
DIACETONE ALCOHOL (CAS 123-42-2)	PEL	240 mg/m <sup>3</sup>	
		50 ppm	
ETHYLBENZENE (CAS 100-41-4)	PEL	435 mg/m <sup>3</sup>	
		100 ppm	
METHYL ETHYL KETONE (CAS 78-93-3)	PEL	590 mg/m <sup>3</sup>	
		200 ppm	
PROPANE (CAS 74-98-6)	PEL	1800 mg/m <sup>3</sup>	
		1000 ppm	
XYLENE (CAS 1330-20-7)	PEL	435 mg/m <sup>3</sup>	
		100 ppm	
ZINC OXIDE (CAS 1314-13-2)	PEL	5 mg/m³	Respirable fraction.
,		5 mg/m³	Fume.
		15 mg/m <sup>3</sup>	Total dust.
US. ACGIH Threshold Limit Values		3	
Components	Туре	Value	Form
ACETONE (CAS 67-64-1)	STEL	750 ppm	
(	TWA	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	300 ppm	
	TWA	200 ppm	
N-BUTANE (CAS 106-97-8)	STEL	1000 ppm	
XYLENE (CAS 1330-20-7)	STEL	150 ppm	
7. ZEINE (67.6 1666 E67.)	TWA	100 ppm	
ZINC OXIDE (CAS 1314-13-2)	STEL	10 mg/m <sup>3</sup>	Respirable fraction
21110 071152 (0710 1011 10 2)	TWA	2 mg/m³	Respirable fraction
US. NIOSH: Pocket Guide to Chemical Hazards	1 **/ (	2 mg/m	ricopirable fractions
Components	Туре	Value	Form
ACETONE (CAS 67-64-1)	TWA	590 mg/m <sup>3</sup>	
7.0210112 (07.007 01 1)	1 **/ (	250 ppm	
DIACETONE ALCOHOL (CAS 123-42-2)	TWA	240 mg/m <sup>3</sup>	
DIAGETONE ALGORIGE (GAG 120-42-2)	1 44/4	50 ppm	
ETHYLBENZENE (CAS 100-41-4)	STEL	545 mg/m <sup>3</sup>	
ETITIEDENZENE (OAO 100-41-4)	SILL	125 ppm	
	TWA	435 mg/m <sup>3</sup>	
	1 4 4 7	•	
METHYL ETHYL KETONE (CAS 78-03-3)	STEI	100 ppm	
METHYL ETHYL KETONE (CAS 78-93-3)	STEL	885 mg/m <sup>3</sup>	
METHYL ETHYL KETONE (CAS 78-93-3)		885 mg/m³ 300 ppm	
METHYL ETHYL KETONE (CAS 78-93-3)	STEL TWA	885 mg/m³ 300 ppm 590 mg/m³	
	TWA	885 mg/m <sup>3</sup> 300 ppm 590 mg/m <sup>3</sup> 200 ppm	
METHYL ETHYL KETONE (CAS 78-93-3)  N-BUTANE (CAS 106-97-8)		885 mg/m <sup>3</sup> 300 ppm 590 mg/m <sup>3</sup> 200 ppm 1900 mg/m <sup>3</sup>	
N-BUTANE (CAS 106-97-8)	TWA TWA	885 mg/m <sup>3</sup> 300 ppm 590 mg/m <sup>3</sup> 200 ppm 1900 mg/m <sup>3</sup> 800 ppm	
	TWA	885 mg/m³ 300 ppm 590 mg/m³ 200 ppm 1900 mg/m³ 800 ppm 1800 mg/m³	
N-BUTANE (CAS 106-97-8) PROPANE (CAS 74-98-6)	TWA TWA	885 mg/m³ 300 ppm 590 mg/m³ 200 ppm 1900 mg/m³ 800 ppm 1800 mg/m³ 1000 ppm	Post
N-BUTANE (CAS 106-97-8)	TWA TWA TWA Ceiling	885 mg/m³ 300 ppm 590 mg/m³ 200 ppm 1900 mg/m³ 800 ppm 1800 mg/m³ 1000 ppm	Dust.
N-BUTANE (CAS 106-97-8) PROPANE (CAS 74-98-6)	TWA TWA TWA Ceiling STEL	885 mg/m³ 300 ppm 590 mg/m³ 200 ppm 1900 mg/m³ 800 ppm 1800 mg/m³ 1000 ppm 15 mg/m³ 10 mg/m³	Fume.
N-BUTANE (CAS 106-97-8) PROPANE (CAS 74-98-6)	TWA TWA TWA Ceiling	885 mg/m³ 300 ppm 590 mg/m³ 200 ppm 1900 mg/m³ 800 ppm 1800 mg/m³ 1000 ppm 15 mg/m³ 10 mg/m³ 5 mg/m³	Fume. Dust.
N-BUTANE (CAS 106-97-8) PROPANE (CAS 74-98-6)	TWA TWA TWA Ceiling STEL	885 mg/m³ 300 ppm 590 mg/m³ 200 ppm 1900 mg/m³ 800 ppm 1800 mg/m³ 1000 ppm 15 mg/m³ 10 mg/m³	Fume.

#### **BIOLOGICAL LIMIT VALUES:**

#### **ACGIH Biological Exposure Indices**

Components	Value	Determinant	Specimen	Sampling Time
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	*

<sup>\* -</sup> For sampling details, please see the source document.

<u>APPROPRIATE ENGINEERING CONTROLS</u>: 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).

<u>SKIN PROTECTION</u>: Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier. Wear appropriate chemical resistant clothing.

<u>RESPIRATORY PROTECTION</u>: 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.

<u>GENERAL HYGIENE CONSIDERATIONS</u>: 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:

INITIAL BOILING POINT AND BOILING RANGE:
FLASH POINT:

-305.68 °F (-187.6 °C) estimated
-43.78 °F (-42.1 °C) estimated
-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 (%)

Flammability limit - upper (%)

Explosive limit - lower (%)

Explosive limit - upper (%)

Not available.

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

<u>DECOMPOSITION TEMPERATURE</u>: Not available. <u>VISCOSITY</u>: 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

<u>VOC</u>: 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.

<u>INCOMPATIBLE MATERIALS</u>: 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:

<u>INHALATION</u>: 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.

<u>SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS</u>: 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
CETONE (CAS 67-64-1)		
Acute .		
Dermal	5.115	
LD50	Rabbit	> 15800 mg/kg
Inhalation		
LC50	Rat	76 mg/l, 4 Hours
Oral		
LD50	Mouse	3000 mg/kg
	Rat	5800 mg/kg
DIACETONE ALCOHOL (CAS 123-42-2)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	14.5 ml/kg
Oral		
LD50	Rat	4 g/kg
THYLBENZENE (CAS 100-41-4)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	17800 mg/kg
Oral		5 5
LD50	Rat	3500 mg/kg
METHYL ETHYL KETONE (CAS 78-93-3)		3 3
Acute		
Dermal		
LD50	Rabbit	> 8000 mg/kg
Inhalation	rassit	> 5555 mg/kg
LC50	Mouse	11000 ppm, 45 Minutes
2000	Rat	11700 ppm, 4 Hours
Oral	ιαι	11700 ρριίί, 4 110015
LD50	Mouse	670 mg/kg
LD30	Rat	2300 - 3500 mg/kg
I DLITANE (CAS 106 07 0)	Παι	2300 - 3300 mg/kg
I-BUTANE (CAS 106-97-8) Acute		
Inhalation		
	Mayrea	C00 mm // 0 1 love
LC50	Mouse	680 mg/l, 2 Hours
NEODANE (040.74.00.0)	Rat	658 mg/l, 4 Hours
PROPANE (CAS 74-98-6)		
Acute		
Inhalation	<b>5</b> .	
LC50	Rat	> 1442.847 mg/l, 15 Minute
(YLENE (CAS 1330-20-7)		
Acute .		
Dermal		
LD50	Rabbit	> 43 g/kg
Inhalation		
LC50	Mouse	3907 mg/l, 6 Hours
	Rat	6350 mg/l, 4 Hours
Oral		
LD50	Mouse	1590 mg/kg
	Rat	3523 - 8600 mg/kg
INC (CAS 7440-66-6)		5 5
<u>Acute</u>		
Oral		
LD50	Rat	630 mg/kg
INC OXIDE (CAS 1314-13-2)		5 5
Acute		
Inhalation		5 7 mg/L 4 House
Inhalation LC50	Mouse	> 5 / [MA/I 4 HANKS
LC50	Mouse	> 5.7 mg/l, 4 Hours
	Mouse Mouse	> 5.7 mg/i, 4 ⊓ours 7950 mg/kg

<sup>\*</sup> 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.

<u>CARCINOGENICITY</u>: 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.

<u>REPRODUCTIVE TOXICITY</u>: 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.

<u>SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE</u>: Causes damage to organs through prolonged or repeated exposure. <u>ASPIRATION HAZARD</u>: Not an aspiration hazard.

<u>CHRONIC EFFECTS</u>: 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 w		To all Donorllo
Components		Species	Test Results
ACETONE (CAS 67-64-1)			
Aquatic	FOEO	Water flee (Dephais means)	01.6 00.0 mg/L 40 hours
Crustacea	EC50 LC50	Water flea (Daphnia magna)	21.6 - 23.9 mg/l, 48 hours
Fish	LC50	Rainbow trout, donaldson trout	4740 - 6330 mg/l, 96 hours
DIACETONE ALCOHOL	NC 100 40 0\	(Oncorhynchus mykiss)	
DIACETONE ALCOHOL (C	AS 123-42-2)		
<b>Aquatic</b> Fish	LC50	Pluggill (Longmin magraphicus)	400 mg/L 06 hours
		Bluegill (Lepomis macrochirus)	420 mg/l, 96 hours
ETHYLBENZENE (CAS 10	10-41-4)		
Aquatic	EC50	Water flee (Dephais means)	1 27 4 4 mg/l 40 hours
Crustacea	LC50	Water flea (Daphnia magna)	1.37 - 4.4 mg/l, 48 hours
Fish		Fathead minnow (Pimephales promelas)	7.5 - 11 mg/l, 96 hours
METHYL ETHYL KETONE	(CAS 78-93-3)		
Aquatic	FOFO	Motor floo (Donhais magas)	4005 C440 mg/L 40 hours
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)		,	
Aquatic			
Fish	LC50	Bluegill (Lepomis macrochirus)	7.711 - 9.591 mg/l, 96 hours
ZINC (CAS 7440-66-6)			
Aquatic			
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 1314-1	3-2)	· · · · · · · · · · · · · · · · · · ·	
Aquatic	•		
Fish	LC50	Fathead minnow (Pimephales promelas)	2246 mg/l, 96 hours

<sup>\*</sup> Estimates for product may be based on additional component data not shown.

<u>PERSISTENCE AND DEGRADABILITY</u>: 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.

<u>OTHER ADVERSE EFFECTS</u>: 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**

<u>DISPOSAL INSTRUCTIONS</u>: 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.

<u>HAZARDOUS WASTE CODE</u>: The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

<u>WASTE FROM RESIDUES / UNUSED PRODUCTS</u>: 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).

<u>CONTAMINATED PACKAGING</u>: 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 aircraftForbidden.Cargo aircraft onlyForbidden.

**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 Not established.

Annex II of MARPOL 73/78 and

the IBC Code

## **Section 15: Regulatory Information**

<u>US FEDERAL REGULATIONS</u>: 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)

Chemical name	CAS number	% by wt.
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

Not regulated.

(SDWA)

# 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	No
•	Substances (EINECS)	
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	No
	(PICCS)	
United States & Puerto Rice	o Toxic Substances Control Act (TSCA) Inventory	Yes
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<sup>\*</sup>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

Health: 2 NFPA ratings

> 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

National Institute for Occupational Health and Safety NIOSH

TLV-TWA Threshold Limit, Time Weighted Average

North American Emergency Response Guidebook NAERG **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.