SAFETY DATA SHEET

1. Product and Company Identification

Product identifier	**Zinc Rich Cold Galvanizing Spray (4087-03)**
Other means of identification	Not available
Recommended use	Coating
Recommended restrictions	None known.
Manufacturer information	Nu-Calgon 2611 Schuetz Road St. Louis, MO 63043 US Phone: 314-469-7000 / 800-554-5499 Emergency Phone: 1-800-424-9300 (CHEMTREC)
Supplier	See above.

2. Hazards Identification

Physical hazards	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 2
	Reproductive toxicity	Category 2
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
	Specific target organ toxicity, repeated exposure	Category 2

Environmental hazards Not classified.

WHMIS 2015 defined hazards Not classified

Label elements

Signal word Danger

Hazard statement

Extremely flammable aerosol.
Contains gas under pressure; may explode if heated.
Harmful if swallowed.
Causes skin irritation.
Causes serious eye irritation.
May cause drowsiness or dizziness.
May cause damage to organs through prolonged or repeated exposure.
Suspected of damaging fertility or the unborn child.

Precautionary statement

Prevention

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

Response

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
IF ON SKIN: Wash with plenty of water. Specific treatment (see information on this label). If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
IF exposed or concerned: Get medical advice/attention.

Storage

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

Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
WHMIS 2015: Health Hazard(s) not otherwise classified (HHNOC)	None known
WHMIS 2015: Physical Hazard(s) not otherwise classified (PHNOC)	None known
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	75% of the mixture consists of component(s) of unknown acute oral toxicity.

3. Composition/Information on Ingredients

Mixture

Chemical name	Common name and synonyms	CAS number	%
Petroleum gases, liquefied, sweetened		68476-86-8	30-60
Toluene		108-88-3	15-40
Methyl acetate		79-20-9	10-30
Zinc, elemental		7440-66-6	10-30
Distillates (petroleum), light hydrotreated		64742-47-8	1-5
Zinc oxide		1314-13-2	0.1-1

Composition comments US GHS: The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

4. First Aid Measures

Inhalation	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
Skin contact	IF ON SKIN: Wash with plenty of water. Specific treatment (see information on this label). If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.
Eye contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Ingestion	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
Most important symptoms/effects, acute and delayed	Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause drowsiness or dizziness. 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. In case of shortness of breath, give oxygen. Symptoms may be delayed.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. IF exposed or concerned: Get medical advice/attention. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Wear rubber gloves and safety glasses with side shields. Keep out of reach of children. Do not puncture or incinerate container. Do not store at temperatures above 49°C. Keep away from sources of ignition. No smoking.

5. Fire Fighting Measures

Suitable extinguishing media	Powder. Foam. Carbon dioxide. Water Fog.
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. Cool containers with flooding quantities of water until well after fire is out. Firefighters should wear a self-contained breathing apparatus.
Special protective equipment and precautions for firefighters	Firefighters should wear full protective clothing including self contained breathing apparatus.
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 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.
Hazardous combustion products	May include and are not limited to: Oxides of nitrogen. Oxides of carbon. Oxides of zinc.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep out of low areas. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid breathing gas. 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. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not contaminate water. 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. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. 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. Use only with adequate ventilation. Do not breathe gas. Do not taste or swallow. Avoid contact during pregnancy/while nursing. Avoid prolonged exposure. Wear appropriate personal protective equipment. When using, do not eat, drink or smoke. Wash thoroughly after handling. Use good industrial hygiene practices in handling this material. Avoid contact with eyes, skin and clothing.
Conditions for safe storage, including any incompatibilities	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 in a cool, dry place out of direct sunlight. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Keep out of reach of children. Keep away from heat, open flames or other sources of ignition.

8. Exposure Controls/Personal Protection

Occupational exposure limits

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

Components	Type	Value	Form
Distillates (petroleum), light hydrotreated (CAS 64742-47-8)	TWA	200 mg/m3	Vapor.
Methyl acetate (CAS 79-20-9)	STEL	757 mg/m3	
		250 ppm	
	TWA	606 mg/m3	
		200 ppm	
Toluene (CAS 108-88-3)	TWA	188 mg/m3	
		50 ppm	
Zinc oxide (CAS 1314-13-2)	STEL	10 mg/m3	Respirable.
	TWA	2 mg/m3	Respirable.

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

Components	Type	Value	Form
Distillates (petroleum), light hydrotreated (CAS 64742-47-8)	TWA	200 mg/m3	Non-aerosol.
Methyl acetate (CAS 79-20-9)	STEL	250 ppm	
	TWA	200 ppm	
Toluene (CAS 108-88-3)	TWA	20 ppm	

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

Components	Type	Value	Form
Zinc oxide (CAS 1314-13-2)	STEL	10 mg/m3	Respirable.
	TWA	2 mg/m3	Respirable.

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

Components	Type	Value	Form
Methyl acetate (CAS 79-20-9)	STEL	250 ppm	
	TWA	200 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.

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

Components	Type	Value	Form
Methyl acetate (CAS 79-20-9)	STEL	250 ppm	
	TWA	200 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.

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

Components	Type	Value	Form
Methyl acetate (CAS 79-20-9)	STEL	757 mg/m3	
		250 ppm	
	TWA	606 mg/m3	
		200 ppm	
Toluene (CAS 108-88-3)	TWA	188 mg/m3	
		50 ppm	
Zinc oxide (CAS 1314-13-2)	STEL	10 mg/m3	Fume.
	TWA	5 mg/m3	Fume.
		10 mg/m3	Total dust.

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/m3	
		200 ppm	
Zinc oxide (CAS 1314-13-2)	PEL	5 mg/m3	Fume.
		5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

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

Components	Type	Value
Toluene (CAS 108-88-3)	Ceiling	300 ppm
	TWA	200 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Methyl acetate (CAS 79-20-9)	STEL	250 ppm	
	TWA	200 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
Distillates (petroleum), light hydrotreated (CAS 64742-47-8)	TWA	100 mg/m3	
Methyl acetate (CAS 79-20-9)	STEL	760 mg/m3	
		250 ppm	
	TWA	610 mg/m3	
		200 ppm	
Toluene (CAS 108-88-3)	STEL	560 mg/m3	
		150 ppm	
	TWA	375 mg/m3	
		100 ppm	
Zinc oxide (CAS 1314-13-2)	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
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

Canada - Alberta OELs: Skin designation

Distillates (petroleum), light hydrotreated (CAS 64742-47-8)	Can be absorbed through the skin.
Toluene (CAS 108-88-3)	Can be absorbed through the skin.

Canada - British Columbia OELs: Skin designation

Distillates (petroleum), light hydrotreated (CAS 64742-47-8)	Can be absorbed through the skin.

Canada - Quebec OELs: Skin designation

Toluene (CAS 108-88-3)	Can be absorbed through the skin.

Canada - Saskatchewan OELs: Skin designation

Distillates (petroleum), light hydrotreated (CAS 64742-47-8)	Can be absorbed through the skin.
Toluene (CAS 108-88-3)	Can be absorbed through the skin.

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.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Rubber gloves. Confirm with a reputable supplier first.

Other Wear appropriate chemical resistant clothing. As required by employer code.

Respiratory protection Wear positive pressure self-contained breathing apparatus (SCBA). Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.

Thermal hazards Not applicable.

General hygiene considerations When using, do not eat, drink or 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 Aerosol.

Physical state Gas.

Form	Spray
Color	Grey / Black
Odor	Solvent
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Pour point	Not available.
Specific gravity	1.165 (liquid), 0.8074 (aerosol)
Partition coefficient (n-octanol/water)	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	40-60 psi @ 130°F, 40-60 psi @ 70°F
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.

10. Stability and Reactivity

Reactivity	This product may react with strong oxidizing agents.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Do not mix with other chemicals. Aerosol containers are unstable at temperatures above 49°C (120.2°F).
Incompatible materials	Strong oxidizing agents. Nitrates. Fluorine. Chlorine.
Hazardous decomposition products	May include and are not limited to: Oxides of nitrogen. Oxides of carbon. Oxides of zinc.

11. Toxicological Information

Routes of exposure	Eye, Skin contact, Inhalation, Ingestion.
Information on likely routes of exposure	
Ingestion	Harmful if swallowed.
Inhalation	Prolonged inhalation may be harmful. May cause damage to organs by inhalation. Narcotic effects.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation.
Symptoms related to the physical, chemical and toxicological characteristics	Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.
Information on toxicological effects	
Acute toxicity	Harmful if swallowed. Narcotic effects.

Components	Species	Test Results
Distillates (petroleum), light hydrotreated (CAS 64742-47-8)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Inhalation		
LC50	Rat	> 2.8 mg/l/4h
Oral		
LD50	Rat	> 5000 mg/kg
Methyl acetate (CAS 79-20-9)		
Acute		
Dermal		
LD50	Rabbit	> 5000 mg/kg
Inhalation		
LC50	Rat	> 16000 ppm
Oral		
LD50	Rabbit	3705 mg/kg
		3.7 g/kg
	Rat	> 5000 mg/kg
Petroleum gases, liquefied, sweetened (CAS 68476-86-8)		
Inhalation		
LC50	Not available	
Oral		
LD50	Not available	
Toluene (CAS 108-88-3)		
Acute		
Dermal		
LD50	Rabbit	12196 mg/kg
		12125 mg/kg
		8390 mg/kg
		14.1 ml/kg
Inhalation		
LC50	Mouse	7100 mg/L, 4 Hours
		5320 ppm, 8 Hours
		400 ppm, 24 Hours
	Rat	26700 ppm, 1 Hours
		<= 28800 mg/m³, 4 Hours
		12200 ppm, 2 Hours
		8000 ppm, 4 Hours
		12.5 mg/l/4h
Oral		
LD50	Rat	> 5580 mg/kg
		636 mg/kg
Zinc oxide (CAS 1314-13-2)		
Acute		
Inhalation		
LC50	Mouse	> 5.7 mg/L, 4 Hours
		2500 mg/m3
Oral		
LD50	Mouse	7950 mg/kg
	Rat	> 5 g/kg
		5000 mg/kg

Components	Species	Test Results
Zinc, elemental (CAS 7440-66-6)		
Acute		
Inhalation		
LC50	Not available	
Oral		
LD50	Rat	630 mg/kg

Skin corrosion/irritation Causes skin irritation.

Exposure minutes Not available.

Erythema value Not available.

Oedema value Not available.

Serious eye damage/eye irritation Causes serious eye irritation.

Corneal opacity value Not available.

Iris lesion value Not available.

Conjunctival reddening value Not available.

Conjunctival oedema value Not available.

Recover days Not available.

Respiratory or skin sensitization

Respiratory sensitization Not available.

Skin sensitization Prolonged or repeated exposure can cause drying, defatting and dermatitis.

Mutagenicity Non-hazardous by WHMIS/OSHA criteria.

Carcinogenicity Non-hazardous by WHMIS/OSHA criteria.

ACGIH Carcinogens

Cadmium (CAS 7440-43-9)	A2 Suspected human carcinogen.
Lead (CAS 7439-92-1)	A3 Confirmed animal carcinogen with unknown relevance to humans.
Toluene (CAS 108-88-3)	A4 Not classifiable as a human carcinogen.

Canada - Alberta OELs: Carcinogen category

Cadmium (CAS 7440-43-9)	Suspected human carcinogen.

Canada - Manitoba OELs: carcinogenicity

CADMIUM AND COMPOUNDS, AS CD, RESPIRABLE FRACTION (CAS 7440-43-9)	Suspected human carcinogen.
LEAD AND INORGANIC COMPOUNDS, AS PB (CAS 7439-92-1)	Confirmed animal carcinogen with unknown relevance to humans.
TOLUENE (CAS 108-88-3)	Not classifiable as a human carcinogen.

Canada - Quebec OELs: Carcinogen category

Cadmium (CAS 7440-43-9)	Suspected carcinogenic effect in humans.
Lead (CAS 7439-92-1)	Detected carcinogenic effect in animals.

IARC Monographs. Overall Evaluation of Carcinogenicity

Cadmium (CAS 7440-43-9)	Volume 58, Volume 100C 1 Carcinogenic to humans.
Lead (CAS 7439-92-1)	Volume 23, Supplement 7 - 2B Possibly carcinogenic to humans.
Silica (CAS 7631-86-9)	Volume 68 - 3 Not classifiable as to carcinogenicity to humans.
Stoddard solvent (CAS 8052-41-3)	Volume 47 - 3 Not classifiable as to carcinogenicity to humans.
Toluene (CAS 108-88-3)	Volume 47, Volume 71 - 3 Not classifiable as to carcinogenicity to humans.

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

Cadmium (CAS 7440-43-9)
Lead (CAS 7439-92-1)

US NTP Report on Carcinogens: Anticipated carcinogen

Lead (CAS 7439-92-1)	Reasonably Anticipated to be a Human Carcinogen.

US NTP Report on Carcinogens: Known carcinogen

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

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

Cadmium (CAS 7440-43-9)	Cancer

Reproductive toxicity Hazardous by WHMIS criteria. Suspected of damaging the unborn child.

Teratogenicity Toluene (benzene, methyl-) has caused fetotoxicity (reduced fetal weight), behavioural effects (effects on learning and memory) and hearing loss (in males). These effects have been observed in the offspring of rats exposed by inhalation to 1200 or 1800 ppm toluene. These effects were observed in the absence of maternal toxicity.

Specific target organ toxicity - single exposure	Narcotic effects.
Specific target organ toxicity - repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	Not available.
Chronic effects	Prolonged inhalation may be harmful. May cause damage to organs through prolonged or repeated exposure.

12. Ecological Information

Ecotoxicity See below

Ecotoxicological data

Components		Species	Test Results
Distillates (petroleum), light hydrotreated (CAS 64742-47-8)			
Aquatic			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	2.9 mg/L, 96 hours
Methyl acetate (CAS 79-20-9)			
Algae	IC50	Algae	120 mg/L, 72 hours
Crustacea	EC50	Daphnia	1026.7 mg/L, 48 hours
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	295 - 348 mg/L, 96 hours
Toluene (CAS 108-88-3)			
Algae	IC50	Algae	433 mg/L, 72 Hours
Crustacea	EC50	Daphnia	7.645 mg/L, 48 Hours
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	5.46 - 9.83 mg/L, 48 hours
Fish	LC50	Coho salmon,silver salmon (Oncorhynchus kisutch)	8.11 mg/L, 96 hours
Zinc oxide (CAS 1314-13-2)			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	2246 mg/L, 96 hours
Zinc, elemental (CAS 7440-66-6)			
Algae	IC50	Algae	0.191 mg/L, 72 Hours
Crustacea	EC50	Daphnia	0.524 mg/L, 48 Hours
Aquatic			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	0.56 mg/L, 96 hours

Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Mobility in general	Not 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	Consult authorities before disposal. Contents under pressure. Do not puncture, incinerate or crush. This material and its container must be disposed of as hazardous waste. 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 Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. Do not re-use empty containers.

14. Transport Information

Transport of Dangerous Goods (TDG) Proof of Classification In accordance with Part 2.2.1 (SOR/2014-152) of the Transportation of Dangerous Goods Regulations, we certify that the classification of this product is correct as of the SDS date of issue.

U.S. Department of Transportation (DOT)

Basic shipping requirements:

UN number	UN1950
Proper shipping name	Aerosols, flammable, (each not exceeding 1 L capacity)
Hazard class	Limited Quantity - US
Special provisions	N82
Packaging exceptions	306
Packaging non bulk	None
Packaging bulk	None

Transportation of Dangerous Goods (TDG - Canada)

Basic shipping requirements:

UN number	UN1950
Proper shipping name	AEROSOLS, flammable
Hazard class	Limited Quantity - Canada
Special provisions	80, 107

IATA/ICAO (Air)

Basic shipping requirements:

UN number	UN1950
Proper shipping name	Aerosols, flammable
Hazard class	Limited Quantity - IATA

IMDG (Marine Transport)

Basic shipping requirements:

UN number	UN1950
Proper shipping name	AEROSOLS, flammable
Hazard class	Limited Quantity - IMDG

DOT; IMDG; TDG

IATA

15. Regulatory Information

Canadian federal regulations This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (SOR/2015-17) and the SDS contains all the information required by the HPR.

Canada CEPA Schedule I: Listed substance

Cadmium (CAS 7440-43-9)	Listed.
Lead (CAS 7439-92-1)	Listed.
Zinc oxide (CAS 1314-13-2)	Listed.
Zinc, elemental (CAS 7440-66-6)	Listed.

Canada NPRI VOCs with Additional Reporting Requirements: Mass reporting threshold/Identification Number

Distillates (petroleum), light hydrotreated (CAS 64742-47-8)	1 TONNES
Stoddard solvent (CAS 8052-41-3)	1 TONNES
Toluene (CAS 108-88-3)	1 TONNES

Canada Priority Substances List (Second List): Listed substance

Zinc oxide (CAS 1314-13-2)	Listed.
Zinc, elemental (CAS 7440-66-6)	Listed.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Toluene (CAS 108-88-3)	Class B

WHMIS 2015 Exemptions Not applicable

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.
Copper (CAS 7440-50-8)	Listed.
Lead (CAS 7439-92-1)	Listed.
Methyl acetate (CAS 79-20-9)	Listed.
Toluene (CAS 108-88-3)	Listed.
Zinc oxide (CAS 1314-13-2)	Listed.
Zinc, elemental (CAS 7440-66-6)	Listed.

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

Cadmium (CAS 7440-43-9)	Cancer
Lead (CAS 7439-92-1)	Reproductive toxicity
Cadmium (CAS 7440-43-9)	Lung
Lead (CAS 7439-92-1)	Central nervous system
Cadmium (CAS 7440-43-9)	Kidney
Lead (CAS 7439-92-1)	Kidney
Cadmium (CAS 7440-43-9)	Acute toxicity
Lead (CAS 7439-92-1)	Blood
	Acute toxicity

Superfund Amendments and Reauthorization Act of 1986 (SARA)

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

SARA 302 Extremely hazardous substance No

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Toluene	108-88-3	15-40
Zinc, elemental	7440-66-6	10-30

Other federal regulations

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

Cadmium (CAS 7440-43-9)
Lead (CAS 7439-92-1)
Toluene (CAS 108-88-3)

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

Not regulated.

US state regulations

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

Cadmium (CAS 7440-43-9)	Listed.
Copper (CAS 7440-50-8)	Listed.
Lead (CAS 7439-92-1)	Listed.
Methyl acetate (CAS 79-20-9)	Listed.

Silica (CAS 7631-86-9)	Listed.
Stoddard solvent (CAS 8052-41-3)	Listed.
Toluene (CAS 108-88-3)	Listed.
Zinc oxide (CAS 1314-13-2)	Listed.
Zinc, elemental (CAS 7440-66-6)	Listed.

US - Illinois Chemical Safety Act: Listed substance

Cadmium (CAS 7440-43-9)
Copper (CAS 7440-50-8)
Lead (CAS 7439-92-1)
Methyl acetate (CAS 79-20-9)
Toluene (CAS 108-88-3)
Zinc oxide (CAS 1314-13-2)
Zinc, elemental (CAS 7440-66-6)

US - Louisiana Spill Reporting: Listed substance

Cadmium (CAS 7440-43-9)	Listed.
Copper (CAS 7440-50-8)	Listed.
Lead (CAS 7439-92-1)	Listed.
Methyl acetate (CAS 79-20-9)	Listed.
Toluene (CAS 108-88-3)	Listed.
Zinc oxide (CAS 1314-13-2)	Listed.
Zinc, elemental (CAS 7440-66-6)	Listed.

US - Michigan Critical Materials Register: Parameter number

Cadmium (CAS 7440-43-9)	CADMIUM
Copper (CAS 7440-50-8)	COPPER
Lead (CAS 7439-92-1)	LEAD
Toluene (CAS 108-88-3)	TOLUENE
Zinc oxide (CAS 1314-13-2)	ZINC
Zinc, elemental (CAS 7440-66-6)	ZINC

US - Minnesota Haz Subs: Listed substance

Cadmium (CAS 7440-43-9)	Listed.
Copper (CAS 7440-50-8)	Listed.
Lead (CAS 7439-92-1)	Listed.
Methyl acetate (CAS 79-20-9)	Listed.
Silica (CAS 7631-86-9)	Listed.
Stoddard solvent (CAS 8052-41-3)	Listed.
Toluene (CAS 108-88-3)	Listed.
Zinc oxide (CAS 1314-13-2)	Listed.

US - New Jersey RTK - Substances: Listed substance

Cadmium (CAS 7440-43-9)
Copper (CAS 7440-50-8)
Lead (CAS 7439-92-1)
Methyl acetate (CAS 79-20-9)
Silica (CAS 7631-86-9)
Stoddard solvent (CAS 8052-41-3)
Toluene (CAS 108-88-3)
Zinc oxide (CAS 1314-13-2)
Zinc, elemental (CAS 7440-66-6)

US - North Carolina Toxic Air Pollutants: Listed substance

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

US - Pennsylvania RTK - Hazardous Substances: Special hazard

Cadmium (CAS 7440-43-9)

US - Texas Effects Screening Levels: Listed substance

Cadmium (CAS 7440-43-9)	Listed.
Copper (CAS 7440-50-8)	Listed.
Distillates (petroleum), light hydrotreated (CAS 64742-47-8)	Listed.
Lead (CAS 7439-92-1)	Listed.
Methyl acetate (CAS 79-20-9)	Listed.
Silica (CAS 7631-86-9)	Listed.
Stoddard solvent (CAS 8052-41-3)	Listed.
Toluene (CAS 108-88-3)	Listed.
Zinc oxide (CAS 1314-13-2)	Listed.
Zinc, elemental (CAS 7440-66-6)	Listed.

US - Washington Chemical of High Concern to Children: Listed substance

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

US. Massachusetts RTK - Substance List

Cadmium (CAS 7440-43-9)
Copper (CAS 7440-50-8)
Distillates (petroleum), light hydrotreated (CAS 64742-47-8)
Lead (CAS 7439-92-1)
Methyl acetate (CAS 79-20-9)
Silica (CAS 7631-86-9)
Stoddard solvent (CAS 8052-41-3)
Toluene (CAS 108-88-3)
Zinc oxide (CAS 1314-13-2)
Zinc, elemental (CAS 7440-66-6)

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

Cadmium (CAS 7440-43-9)
Copper (CAS 7440-50-8)
Distillates (petroleum), light hydrotreated (CAS 64742-47-8)
Lead (CAS 7439-92-1)
Toluene (CAS 108-88-3)
Zinc oxide (CAS 1314-13-2)
Zinc, elemental (CAS 7440-66-6)

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

Cadmium (CAS 7440-43-9)
Copper (CAS 7440-50-8)
Distillates (petroleum), light hydrotreated (CAS 64742-47-8)
Lead (CAS 7439-92-1)
Methyl acetate (CAS 79-20-9)
Silica (CAS 7631-86-9)
Stoddard solvent (CAS 8052-41-3)
Toluene (CAS 108-88-3)
Zinc oxide (CAS 1314-13-2)
Zinc, elemental (CAS 7440-66-6)

US. Rhode Island RTK

Cadmium (CAS 7440-43-9)
Copper (CAS 7440-50-8)
Lead (CAS 7439-92-1)
Toluene (CAS 108-88-3)
Zinc oxide (CAS 1314-13-2)
Zinc, elemental (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

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
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

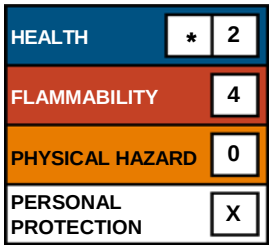
Inventory status

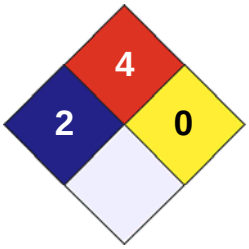
Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0





Disclaimer

The information in the sheet was written based on the best knowledge and experience currently available. Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

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Other information For an updated SDS, please contact the supplier/manufacturer listed on the first page of the document.