

Material Safety Data Sheet

WHMIS 	Protective Clothing 	TDG Road / Rail
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Section 1. Product Identification and Uses

Product Name	76245 Zinc Rich Cold Galvanizing	CI#	Not available.
Synonyms	Not available.	DSL	Not available.
Chemical Name	Not applicable.	CAS #	Not applicable.
Chemical Formula	Chemical mixture.	Code	1515-14-001
Chemical Family	Organic/inorganic.	Molecular Weight	Not applicable.
Supplier	Osborn International 5401 Hamilton Avenue, Cleveland, Ohio, U.S.A. 44114 PHONE: (216) 361-1900	Manufacturer	Manufactured for: Osborn International
Material Uses	Zinc rich cold galvanizing spray.		



Section 2. Hazardous Ingredients

Name	CAS #	% by Weight	LC ₅₀ /LD ₅₀
1) Zinc	7440-66-6	15-40	Not available. ORAL (LD50) mg/kg: Acute: 4300 (Rat). 6100 (Rat). VAPOR (LC50) ppm : Acute: 5000 (Rat) (4 hour(s)). ORAL (LD50) mg/kg: Acute: 3500 (Rat). DERMAL (LD50) mg/kg: Acute: 5000 (Rabbit). ORAL (LD50) mg/kg: Acute: 6520 (Rat). 2600 (Rat). DERMAL (LD50) mg/kg: Acute: 12210 (Rabbit). VAPOR (LC50) ppm : Acute: 8000 (Rat) (4 hour(s)). ORAL (LD50) mg/kg: Acute: 9750 (Rat). DERMAL (LD50) mg/kg: Acute: 20000 (Rabbit). VAPOR (LC50) ppm : Acute: 16000 (Rat) (4 hour(s)).
2) Xylene	1330-20-7	5-15	
3) Ethylbenzene	100-41-4	0.4-2.5	
4) Toluene	108-88-3	5-15	
5) Acetone	67-64-1	10-30	
6) Liquefied petroleum gas	68476-85-7	10-30	

Section 3. Physical Data

Physical State and Appearance	Liquid (Aerosol Concentrate).	Odor	Characteristic.
pH (1% Soln/Water)	Not available.	Taste	Not available.
Odor Threshold	2.14 ppm based on data for: Toluene	Color	Gray
Volatility	Not available.		
Evaporation Rate	1.8 based on data for: Toluene. Weighted average: 1.76 [Butyl acetate.]		
Melting Point	Not available.		
Boiling Point	110.6°C (231.1°F) based on data for: Toluene. Weighted average: 111.12°C (232°F)		
Density	Weighted average: 1.404 @ 20°C (68°F) (Water = 1)		
Vapor Density	3.18 (Air = 1) based on data for: Toluene		
Vapor Pressure	Weighted average: 94.43 mm of Hg (@ 20°C)		
LogK_{ow}	Not available.		
Ionicity (Surface Active Agent)	Not available.		
Critical Temperature	Not available.		

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Instability Temperature	Not available.
Conditions of Instability	No additional remark.
Dispersion Properties	See solubility in water, methanol, diethyl ether, n-octanol.
Solubility	Easily soluble in diethyl ether, n-octanol. Soluble in methanol. Insoluble in water.



Section 4. Fire and Explosion Data

The Product is:	Extremely Flammable Aerosol
Auto-ignition Temperature	464°C (867.2°F) based on data for: Xylene.
Products of Combustion	These products are carbon oxides (CO, CO ₂), some metallic oxides, hydrogen chloride, traces of phosgene and other irritating gases.
Flash Points	CLOSED CUP: (Setaflash) 4.4°C (39.9°F) (Toluene).
Flammable Limits	LOWER: 1.2% (Toluene) UPPER: 7.1% (Toluene)
Extinguishing Media	Extremely Flammable Aerosol, liquid is insoluble in water. SMALL FIRE: Use DRY chemicals, CO ₂ or alcohol foam. **DO NOT USE WATER!** LARGE FIRE: Use alcohol foam. **DO NOT USE WATER!** Water only to be used to cool containing vessels with water spray in order to prevent pressure build-up, autoignition or explosion. Avoid spreading burning liquid with water used to cool containers. Self-contained respiratory protection should be provided for firefighters. Hydrogen gas may form if this product comes in contact with water producing an explosive environment.
Flammability	The flammability of an aerosol by WHMIS definition is determined by its flame-extension or its flashback. The flame-extension of this product is greater than 45 cm. FIRE CODE: Level 2 Aerosol (as per NFPA 30B). Do not use in the presence of open flame or spark. Do not place in hot water or near radiators, stoves or other sources of heat.
Risks of Explosion	Risks of explosion of the product in presence of mechanical impact: Do NOT subject aerosol cans to impact. Risks of explosion of the product in presence of static discharge: Vapours of this product may form a flammable/explosive mixture with air in enclosed areas when vapours present are between the lower (1.2%) and upper (7.1%) flammable limits and come into contact with open flames, sparks or static discharge. Do NOT expose aerosol containers to open flames, heat or ignition sources. Container may explode if heated.

Section 5. Reactivity

Stability	The product is stable.
Hazardous Decomposition Products	These products are carbon oxides (CO, CO ₂), some metallic oxides, hydrogen chloride, traces of phosgene and other irritating gases.
Degradability	Not available.
Products of Degradation	Not available. Not available.
Corrosivity	Non-corrosive in presence of glass.
Reactivity	Avoid contact with strong oxidizing agents, strong acids, strong alkalis and moisture. Keep away from heat, sparks, open flame and all possible ignition sources.
Instability Temperature	Not available.

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Conditions of Instability No additional remark.

Section 6. Toxicological Properties

Routes of Entry Ingestion. Inhalation. Skin contact. Eye contact.


TLV	<p>Zinc TWA: 15 (mg/m³) from OSHA (PEL) TWA: 5 (mg/m³) from ACGIH</p> <p>Xylene TWA: 100 CEIL: 150 (ppm) TWA: 435 CEIL: 655 (mg/m³)</p> <p>Ethylbenzene TWA: 100 CEIL: 125 (ppm) TWA: 435 CEIL: 545 (mg/m³)</p> <p>Toluene TWA: 50 CEIL: 150 (ppm) TWA: 375 CEIL: 560 (mg/m³)</p> <p>Acetone TWA: 750 (ppm)</p> <p>Liquefied petroleum gas TWA: 1000 CEIL: 1250 (ppm) TWA: 1800 CEIL: 2250 (mg/m³)</p> <p>Consult local authorities for acceptable exposure limits.</p>
Toxicity to Animals	<p>WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE.</p> <p>Acute oral toxicity (LD50): 9750 mg/kg [Rat] (Acetone). Acute oral toxicity (LD50): 5000 mg/kg [Rat] (Toluene). Acute oral toxicity (LD50): 4300 mg/kg [Rat]. (Xylene). Acute dermal toxicity (LD50): 20000 mg/kg [Rabbit]. (Acetone). Acute dermal toxicity (LD50): > 5000 mg/kg (Rabbit) (Toluene). Acute dermal toxicity (LD50): 5000 mg/kg (Rabbit) (Ethylbenzene). Acute toxicity of the vapor (LC50): 16000 ppm [Rat] (Acetone). Acute toxicity of the vapor (LC50): > 5000 ppm (Rat) (Toluene). Acute toxicity of the vapor (LC50): 5000 ppm (Rat) (Xylene).</p>
Chronic Effects on Humans	Prolonged or repeated skin contact may lead to dermatitis.
Acute Effects on Humans	<p>EYE CONTACT: May cause irritation, redness and tearing. This product is an eye irritant.</p> <p>SKIN CONTACT: May cause irritation, defatting, drying and cracking of skin. Prolonged and repeated contact may lead to dermatitis.</p> <p>INHALATION: Vapours may be irritating to nose, throat and respiratory tract. Excessive inhalation of vapours may cause Central Nervous System effects including dizziness, weakness, fatigue, nausea, headache, narcosis, euphoria, pupil dilation and possible unconsciousness.</p> <p>INGESTION: May cause gastrointestinal irritation, Central Nervous System effects (see inhalation), nausea, vomiting, diarrhea, kidney and liver damage. Aspiration of material into the lungs may cause chemical pneumonitis, which can be fatal.</p> <p>Can be fatal if inhaled or ingested. This product may irritate eyes and skin upon contact.</p>
Synergetic Products (Toxicologically)	Not available.
Irritation/Corrosivity	Not available.
Sensitization	Not available.
Carcinogenic Effects	Ethyl Benzene is classified by IARC (International Agency for Research on Cancer) as possibly carcinogenic to humans (Class 2B).
Toxic Effects on Reproduction	This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

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Teratogenic Effects	Not available.
Mutagenic Effects	Not available.

Section 7. Preventive Measures

Small Spill and Leak	Ventilate area and eliminate all sources of ignition. Keep away from heat. Absorb with an inert DRY material and place in an appropriate waste disposal container. Wear protective clothing to cleanup spills (see Section IX).	
Personal Protective Equipment	It is recommended to wear safety glasses and gloves (chemical resistant). Be sure to use a MSHA/NIOSH approved respirator or equivalent when ventilation is inadequate.	
Large Spill and Leak	Not applicable for aerosol containers.	
Protective Clothing	Not applicable for aerosol containers.	
Engineering Controls	Use under well-ventilated conditions.	
Precautions	Contents under pressure. Container may explode if heated. Direct inhalation of spray may be harmful. Keep out of reach of children.	
Storage	Store in a cool, dry place. Do not place in hot water or near radiators, stoves or other sources of heat. Do not puncture or incinerate container or store at temperatures over 50°C or in direct sunlight.	
Handling	Do not use in the presence of open flame, sparks or ignition sources. Keep away from heat. Avoid breathing vapours or spray mists. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. After handling, always wash hands thoroughly with soap and water.	
Waste Disposal	Recycle to process, if possible. Consult your local or regional authorities. Do not dispose in sewers. When container is empty, press button to release all pressure, then dispose of in garbage can.	
Special Shipping Information	Not available.	

Section 8. First Aid

Eye Contact	IMMEDIATELY flush eyes with plenty of running water for at least 15 minutes keep eyelids open, get medical attention.
Skin Contact	Wash the affected areas with soap and water. If irritation persists, seek medical attention. Remove contaminated clothing and wash before reuse.
Hazardous Skin Contact	No additional information.
Slight Inhalation	Remove affected person to fresh air. If breathing is difficult, administer oxygen. If breathing stops give artificial respiration. Keep person warm, quiet and get medical attention.
Hazardous Inhalation	No additional information.
Slight Ingestion	If swallowed, call physician or poison control centre immediately. DO NOT induce vomiting. Rinse mouth with water. Aspiration of material into lungs due to vomiting may cause chemical pneumonitis which can be fatal.
Hazardous Ingestion	No additional information.

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Section 9. MSDS Preparation

References Not available.

No additional remark.

Validated by Regulatory Affairs Dept. on 1/31/2002.

Verified by Regulatory Affairs Dept..

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Emergency Phone: (905) 677-1948

Responsible
Name/
Telephone No.

Classification

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Not applicable.

WHMIS WHMIS CLASS A: Compressed gas.
WHMIS CLASS B-5: Flammable aerosol.
WHMIS CLASS D-2B: Material causing other toxic effects (TOXIC).



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