

# SAFETY DATA SHEET

Sid Harvey item # 4087-03

SDS # Z0390

Category 2

Category 2

# 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 Nu-Calgon

2008 Altom Court St. Louis, MO 63146 US

Phone: 314-469-7000 / 800-554-5499

Emergency Phone: 1-800-424-9300 (CHEMTREC)

## 2. Hazards Identification

Physical hazards Flammable aerosols Category 1

Gases under pressure

Acute toxicity, oral

Skin corrosion/irritation

Serious eye damage/eye irritation

Liquefied gas

Category 4

Category 2

Category 2

Specific target organ toxicity, single exposure Category 3 narcotic effects

Specific target organ toxicity, repeated

Reproductive toxicity (the unborn child)

exposure

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Health hazards



Signal word Dange

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 the unborn child.

**Precautionary statement** 

**Prevention** Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open

flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. 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 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.

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Hazard(s) not otherwise classified (HNOC)

None known.

Supplemental information

NA:-----

22% of the mixture consists of component(s) of unknown acute inhalation toxicity. 60% of the mixture consists of component(s) of unknown acute oral toxicity.

# 3. Composition/Information on Ingredients

nixture			
Chemical name	Common name and synonyms	CAS number	%
Butane		106-97-8	15-40
Toluene		108-88-3	15-40
Zinc, elemental		7440-66-6	10-30
Propane		74-98-6	7-13
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

If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison Inhalation

center/doctor if you feel unwell.

Skin contact If on skin: Wash with plenty of water. Specific treatment (see product 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.

If swallowed: Call a poison center/doctor if you feel unwell. Rinse mouth. Ingestion

Most important

symptoms/effects, acute and delayed

Indication of immediate medical attention and special

treatment needed **General information**  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.

Provide general supportive measures and treat symptomatically. In case of shortness of breath, give oxygen. Symptoms may be delayed.

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. 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

Unsuitable extinguishing

media

Specific hazards arising from the chemical

Special protective equipment and precautions for firefighters

Fire-fighting

equipment/instructions

Specific methods

Powder. Foam. Carbon dioxide. Water Fog.

Do not use water jet as an extinguisher, as this will spread the fire.

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.

Firefighters should wear full protective clothing including self contained breathing apparatus.

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.

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

Hazardous combustion products

Extremely flammable aerosol.

May include and are not limited to: Oxides of nitrogen. Oxides of carbon. Oxides of zinc.

**Explosion data** 

Sensitivity to mechanical

impact

Not available.

Sensitivity to static

discharge

Not available.

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## 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 US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) **Form** Components Type Value PEL Propane (CAS 74-98-6) 1800 mg/m3 1000 ppm Zinc oxide (CAS 1314-13-2) PEL 5 ma/m3 Respirable fraction. Fume. 5 mg/m3 15 mg/m3 Total dust. US. OSHA Table Z-2 (29 CFR 1910.1000) Components Value Type Toluene (CAS 108-88-3) Ceiling 300 ppm **TWA** 200 ppm **US. ACGIH Threshold Limit Values** Components Type Value Form Butane (CAS 106-97-8) 1000 ppm STEL Toluene (CAS 108-88-3) 20 ppm TWA 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** Value **Form** Components Type Butane (CAS 106-97-8) TWA 1900 mg/m3 800 ppm Distillates (petroleum), light TWA 100 mg/m3 hydrotreated (CAS 64742-47-8) Propane (CAS 74-98-6) TWA 1800 mg/m3 1000 ppm

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US. NIOSH: Pocket Guide to	Chemical Hazards
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Components	Туре	Value	Form
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 5 mg/m3	Fume. Dust.

## **Biological limit values**

<b>ACGIH</b>	<b>Biological</b>	<b>Exposure</b>	<b>Indices</b>
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Accin biological Expos	are maioco			
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	*

<sup>\* -</sup> 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.

## 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.

Wear positive pressure self-contained breathing apparatus (SCBA). Where exposure guideline Respiratory protection

levels may be exceeded, use an approved NIOSH respirator.

Not applicable. Thermal hazards

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

Aerosol. **Appearance** Gas. Physical state **Form** Spray Grey / Black Color Solvent Odor **Odor threshold** Not available. Not available. Melting point/freezing point Not available.

Initial boiling point and boiling

range

228.2 - 231.8 °F (109 - 111 °C) Estimated

Not available. Pour point 1.1 - 1.175 Specific gravity **Partition coefficient** Not available. (n-octanol/water)

Not available. Flash point Not available. **Evaporation rate** Not applicable. Flammability (solid, gas) Upper/lower flammability or explosive limits

Flammability limit - lower

(%)

Not available.

Flammability limit - upper

Not available.

(%)

Not available. Explosive limit - lower (%) Explosive limit - upper (%) Not available. Vapor pressure Not available. Vapor density Not available. Relative density Not available. Solubility(ies) Not available. Autoavailable. ignition temperature Not **Decomposition** temperature Not available. 300 - 800 cSt **Viscosity** 

Other information

Heat of combustion > 30 kJ/mol

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

Butane (CAS 106-97-8)

Acute

Inhalation

LC50 Mouse 680 mg/L, 2 Hours

Rat 276000 ppm, 4 Hours

658 mg/l/4h

Oral

LD50 Not available

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

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Components	Species	Test Results
Propane (CAS 74-98-6)		
Acute		
Inhalation		
LC50	Rat	> 1442.8 mg/L, 15 Minutes
Oral		
LD50	Not available	
Toluene (CAS 108-88-3)		
Acute		
<i>Dermal</i> LD50	Rabbit	12196 mg/kg
ED30	Kabbit	
		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
Overl		12.3 Hig/l/4H
<i>Oral</i> LD50	Rat	> 5580 mg/kg
2500	Nat	636 mg/kg
7:: (OAC 4044 40 0)		636 mg/kg
Zinc oxide (CAS 1314-13-2)  Acute		
Inhalation		
LC50	Mouse	> 5.7 mg/L, 4 Hours
		2500 mg/m3
Oral		2000 mg/mo
LD50	Mouse	7950 mg/kg
	Rat	> 5 g/kg
	Nat	
7:		5000 mg/kg
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	Not available.	
value		
Conjunctival oedema value	Not available.	
Recover days	Not available.	
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Respiratory or skin sensitization

Not available. Respiratory sensitization

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

Non-hazardous by WHMIS/OSHA criteria. Germ cell mutagenicity Non-hazardous by WHMIS/OSHA criteria. Mutagenicity Carcinogenicity Non-hazardous by WHMIS/OSHA criteria.

**ACGIH Carcinogens** 

Toluene (CAS 108-88-3) A4 Not classifiable as a human carcinogen.

IARC Monographs. Overall Evaluation of Carcinogenicity

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) Carcinogenic. Lead (CAS 7439-92-1) Carcinogenic.

Suspected of damaging the unborn child. Reproductive toxicity

Toluene (benzene, methyl-) has caused fetotoxicity (reduced fetal weight), behavioural effects **Teratogenicity** 

(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

Mobility in soil

Mobility in general

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.

**Further information** Not available. Name of Toxicologically Synergistic Products

Not available.

No data available. Not available.

		12. Ecological Information	
Ecotoxicity	See below		
Components		Species	Test Results
Distillates (petroleum), light h	hydrotreated (CA	S 64742-47-8)	
Aquatic			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	2.9 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 7440-6	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 av	ailable on the degradability of this product.	
Bioaccumulative potential	No data avail	able.	

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# 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.

## US RCRA Hazardous Waste U List: Reference

Toluene (CAS 108-88-3)

U220

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

General

Canada: 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. If applicable, the technical name and the classification of the product will appear below.

## 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 provisionsN82Packaging exceptions306Packaging non bulkNonePackaging bulkNone

Transportation of Dangerous Goods (TDG - Canada)

**Basic shipping requirements:** 

UN number UN1950

Proper shipping name
Hazard class

AEROSOLS, flammable
Limited Quantity - Canada

Special provisions 80, 107

DOT: TDG



# 15. Regulatory Information

Canadian federal regulations

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

## Canada CEPA Schedule I: Listed substance

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

Canada DSL Challenge Substances: Listed substance

Butane (CAS 106-97-8) Listed.

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

Butane (CAS 106-97-8) 1 TONNES

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Distillates (petroleum), light hydrotreated (CAS 1 TONNES

64742-47-8)

Propane (CAS 74-98-6) 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.

**Canada WHMIS Ingredient Disclosure: Threshold limits** 

 Butane (CAS 106-97-8)
 1 %

 Toluene (CAS 108-88-3)
 1 %

 Zinc oxide (CAS 1314-13-2)
 1 %

WHMIS status Controlled

WHMIS classification Class A - Compressed Gas, Class B - Division 5 - Flammable Aerosol, Class D - Division 2A, 2B

WHMIS labeling







**US federal regulations** 

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

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration

Toluene (CAS 108-88-3) 1.0 %
Zinc oxide (CAS 1314-13-2) 1.0 % N982
Zinc, elemental (CAS 7440-66-6) 1.0 %

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

Toluene (CAS 108-88-3)

Zinc oxide (CAS 1314-13-2)

Zinc, elemental (CAS 7440-66-6)

Listed.

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

Not regulated.

US CWA Section 311 Hazardous Substances: Listed substance

Toluene (CAS 108-88-3) Listed.

US CWA Section 307(a)(1) Toxic Pollutants: Listed substance

Toluene (CAS 108-88-3)

Zinc oxide (CAS 1314-13-2)

Zinc, elemental (CAS 7440-66-6)

Listed.

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

 Butane (CAS 106-97-8)
 Listed.

 Propane (CAS 74-98-6)
 Listed.

 Toluene (CAS 108-88-3)
 Listed.

 Zinc oxide (CAS 1314-13-2)
 Listed.

 Zinc, elemental (CAS 7440-66-6)
 Listed.

US CAA Section 111 Volatile Organic Compounds: Listed substance

Toluene (CAS 108-88-3) Listed.

US CAA Section 112(r) Accidental Release Prevention - Regulated Flammable Substance: Listed substance

Butane (CAS 106-97-8)

Propane (CAS 74-98-6)

Regulated flammable substance.

Regulated flammable substance.

US CAA Section 112(r) Accidental Release Prevention: Threshold quantity

Butane (CAS 106-97-8) 10000 LBS Propane (CAS 74-98-6) 10000 LBS

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

Butane (CAS 106-97-8) Listed.
Propane (CAS 74-98-6) Listed.
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Toluene (CAS 108-88-3) Listed.

US CAA Section 612 SNAP Program: Listed substance

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

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

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SARA 302 Extremely No hazardous substance
SARA 311/312 Hazardous 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

Safe Drinking Water Act

Not regulated.

(SDWA)

**US** state regulations

chemical

Food and Drug Not regulated.
Administration (FDA)

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

defects or other reproductive harm.

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

Butane (CAS 106-97-8)

Toluene (CAS 108-88-3)

Zinc oxide (CAS 1314-13-2)

Zinc, elemental (CAS 7440-66-6)

Listed.

## US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

 Cadmium (CAS 7440-43-9)
 Listed.

 Lead (CAS 7439-92-1)
 Listed.

 Toluene (CAS 108-88-3)
 Listed.

US - Illinois Chemical Safety Act: Listed substance

 Butane (CAS 106-97-8)
 Listed.

 Propane (CAS 74-98-6)
 Listed.

 Toluene (CAS 108-88-3)
 Listed.

 Zinc oxide (CAS 1314-13-2)
 Listed.

 Zinc, elemental (CAS 7440-66-6)
 Listed.

US - Louisiana Spill Reporting: Listed substance

Butane (CAS 106-97-8)

Propane (CAS 74-98-6)

Toluene (CAS 108-88-3)

Zinc oxide (CAS 1314-13-2)

Listed.

Zinc, elemental (CAS 7440-66-6)

Listed.

## US - Michigan Critical Materials Register: Parameter number

 Toluene (CAS 108-88-3)
 00108-88-3 Listed.

 Zinc oxide (CAS 1314-13-2)
 07440-66-6 Listed.

 Zinc, elemental (CAS 7440-66-6)
 07440-66-6 Listed.

**US - Minnesota Haz Subs: Listed substance** 

Butane (CAS 106-97-8)

Propane (CAS 74-98-6)

Toluene (CAS 108-88-3)

Zinc oxide (CAS 1314-13-2)

Listed.

Listed.

US - New Jersey RTK - Substances: Listed substance

Butane (CAS 106-97-8)

Propane (CAS 74-98-6)

Toluene (CAS 108-88-3)

Zinc oxide (CAS 1314-13-2)

Zinc, elemental (CAS 7440-66-6)

Listed.

## US - New York Release Reporting: Hazardous Substances: Listed substance

Toluene (CAS 108-88-3)
Zinc, elemental (CAS 7440-66-6)
Listed.
US - North Carolina Toxic Air Pollutants: Listed substance
Toluene (CAS 108-88-3)
Listed.

# US - Pennsylvania RTK - Hazardous Substances: All compounds of this substance are considered environmental hazards

Zinc, elemental (CAS 7440-66-6) Listed.

# US - Texas Effects Screening Levels: Listed substance

Butane (CAS 106-97-8)

Distillates (petroleum), light hydrotreated (CAS 64742-47-8)

Listed.

Listed.

Propane (CAS 74-98-6) Listed.
Toluene (CAS 108-88-3) Listed.

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

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

Toluene (CAS 108-88-3) Listed.

US. Massachusetts RTK - Substance List

Butane (CAS 106-97-8) Listed.
Distillates (petroleum), light hydrotreated (CAS Listed.

64742-47-8)

Propane (CAS 74-98-6)
Toluene (CAS 108-88-3)
Listed.
Zinc oxide (CAS 1314-13-2)
Listed.
Zinc, elemental (CAS 7440-66-6)
Listed.

US. Pennsylvania RTK - Hazardous Substances

Butane (CAS 106-97-8) Listed.
Distillates (petroleum), light hydrotreated (CAS Listed.

64742-47-8)

 Propane (CAS 74-98-6)
 Listed.

 Toluene (CAS 108-88-3)
 Listed.

 Zinc oxide (CAS 1314-13-2)
 Listed.

 Zinc, elemental (CAS 7440-66-6)
 Listed.

**US. Rhode Island RTK** 

 Butane (CAS 106-97-8)
 Listed.

 Propane (CAS 74-98-6)
 Listed.

 Toluene (CAS 108-88-3)
 Listed.

 Zinc oxide (CAS 1314-13-2)
 Listed.

 Zinc, elemental (CAS 7440-66-6)
 Listed.

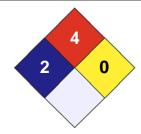
## Inventory status

Country(s) or regionInventory nameOn inventory (yes/no)\*CanadaDomestic Substances List (DSL)YesCanadaNon-Domestic Substances List (NDSL)NoUnited States & Puerto RicoToxic Substances Control Act (TSCA) InventoryYes

#### 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.

Issue date19-August-2015Effective date19-August-2015Expiry date19-August-2018

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

document.

Prepared by Nu-Calgon Technical Service Phone: (314) 469-7000

Other information This Safety Data Sheet was prepared to comply with the current OSHA Hazard Communication

Standard (HCS) adoption of the Globally Harmonized System of Classification and Labeling of

Chemicals (GHS).

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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)



# **MATERIAL SAFETY DATA SHEET**

# SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Company Name Nu-Calgon Wholesaler, Inc.	Phone Number (314) 469-7000 / (800)	554-5499		CHEMTREC (800) 424-9300	
Street Address 2008 Altom Court	City St. Louis	State MO	Postal 63146-		Last Update 3/19/07
Product Name Aerosol, Zinc Rich Cold Galvanizing Compound	Product Number 4087	Product Use Aerosol Zinc Coa	ting		EPA Registration # N/A

# SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

<u>Hazardous Ingredients</u>	<u>% By Wt.</u>	CAS Number	TLV	PEL
Propane	13	74-98-6	2500 ppm	1000 ppm
Butane	12	106-97-8	800 ppm	800 ppm
V. M. & P. Naphtha	8	64742-89-8	300 ppm	300 ppm 400 ppm STEL
Toluene	4	108-88-3	50 ppm (Skin)	100 ppm (Skin) 150 ppm (Skin) STEL
Methyl Ethyl Ketone	11	78-93-3	200 ppm 300 ppm STEL	200 ppm 300 ppm STEL
Zinc	48	7440-66-6	N/A	N/A

## **SECTION 3 – HAZARD IDENTIFICATION**

Emergency Overview: ROUTES OF EXPOSURE: INHALATION of vapor or spray mist. EYE or SKIN contact with the product, vapor or spray mist. SIGNS AND SYMPTOMS OF OVEREXPOSURE: Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists. Redness and itching or burning sensation may indicate eye or excessive skin exposure.

**Potential Health Effects** 

**Eyes:** Irritation.

**Skin:** Prolonged or repeated exposure may cause irritation.

**Ingestion:** No Data.

<u>Inhalation</u>: Irritation of the upper respiratory system. May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.

<u>Chronic Exposure</u>: No ingredient in this product is an IARC, NTP or OSHA listed carcinogen. Methyl Ethyl Ketone may increase the nervous system effects of other solvents. Prolonged overexposure to solvent ingredients in Section 2 may cause adverse effects to the liver, urinary, cardiovascular and reproductive systems. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

<u>Carcinogenicity</u>: No ingredient in this product is an IARC, NTP or OSHA listed carcinogen.

Medical Conditions Aggravated be Exposure: None generally recognized.

## **SECTION 4 – FIRST AID MEASURES**

**Eves:** Flush eyes with large amounts of water for 15 minutes. Get medical attention.

Skin: Wash affected area thoroughly with soap and water. Remove contaminated clothing and launder before re-use.

**Ingestion:** Do not induce vomiting. Get medical attention immediately.

Inhalation: If affected, remove from exposure. Restore breathing. Keep warm and quiet.

# **SECTION 5 – FIREFIGHTING MEASURES**

Flash Point: Propellant < 0 F = LEL 0.9 UEL 10.0

Autoignition Temp: No Data.°C/No Data.°F

Hazardous Products of Combustion: No Data.

Flammable Limits in Air: No Data.

Extinguishing Media: Carbon Dioxide, Dry Chemical, Foam

<u>Fire and Explosion Hazards</u>: Containers may explode when exposed to extreme heat. Application to hot surfaces requires special precautions. During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention

Special Firefighting Procedures: Full protective equipment including self-contained breathing apparatus should be used.

Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

Spill or Leak: Remove all sources of ignition. Ventilate the area. Remove with inert absorbent.

## **SECTION 7 – HANDLING AND STORAGE**

Handling Procedures and Equipment: During use and until all vapors are gone: Keep area ventilated - Do not smoke - Extinguish all flames, pilot lights, and heaters - Turn off stoves, electric tools and appliances, and any other sources of ignition. Consult NFPA Code. Use approved Bonding and Grounding procedures.

Storage Requirements: Keep away from heat, sparks, and open flame. Vapors will accumulate readily and may ignite explosively. Contents under pressure. Do not puncture, incinerate, or expose to temperature above 120F. Heat from sunlight, radiators, stoves, hot water, and other heat sources could cause container to burst. Do not take internally. Keep out of the reach of children.

## SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection: If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2. When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

**Eve Protection:** Wear safety spectacles with unperforated sideshields.

<u>Protective Clothing</u>: None required for normal application of aerosol products where minimal skin contact is expected. For long or repeated contact, wear chemical resistant gloves.

Exposure Guidelines: This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m3 (total dust), 3 mg/m3 (respirable fraction), OSHA PEL 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction).

Specific Engineering Controls (such as ventilation, enclosed process): Use only with adequate ventilation. Avoid contact with skin and eyes. Avoid breathing vapor and spray mist. Wash hands after using. Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

#### **SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES**

Physical Form: Areosol	Freezing Point: No Data.°C/No Data.°F	% Volatile by Weight: 88%
Color: No Data.	Vapor Density [air =1]: Heavier than air	Evaporation Rate: Faster than ether
Odor: No Data.	Vapor Pressure: No Data.	Specific Gravity: 1.16
<b><u>Boiling Point</u></b> : <-18 - 162°C/<0 - 325°F	Solubility in Water: No Data.	pH (concentrate): 7.0

## SECTION 10 – STABILITY AND REACTIVITY

**Chemical Stability: Stable** 

**<u>Hazardous Polymerization</u>**: Will not occur

**Incompatibilities:** None known.

Reactive Conditions to avoid: None known.

**Decomposition Products:** By fire: Carbon Dioxide, Carbon Monoxide

# **SECTION 11 – TOXICOLOGICAL INFORMATION**

Hazardous Ingredients	CAS#	EINECS #	LD 50 of Ingredient (Specify Species)	LC50 of Ingredient (Specify Species)
Propane	74-98-6		N/A	N/A
Butane	106-97-8		N/A	N/A
V. M. & P. Naphtha	64742-89-8		N/A	N/A
Toluene	108-88-3		LD50 RAT 5000 mg/kg	LC50 RAT 4HR 4000 ppm
Methyl Ethyl Ketone	78-93-3		LD50 RAT 2740 mg/kg	LC50 RAT 4HR Not Available
Zinc	7440-66-6		N/A	N/A

# **SECTION 12 – ECOLOGICAL INFORMATION**

<b>Hazardous Ingredients</b>	Aquatic Toxicity Data
No data available.	

# **SECTION 13 – DISPOSAL CONSIDERATIONS**

<u>Waste Disposal</u>: Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers. Do not incinerate. Depressurize container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

# **SECTION 14 – TRANSPORTATION INFORMATION**

Special Ship	oping Information: No Data.			
Purview	Proper Shipping Name	<u>UN Number</u>	Packing Group	Hazard Class
DOT (Land)	Customer Commodity	None	None	ORM-D
IMO (Water)	No Data			
ICAO (Air)	No Data			

# **SECTION 15 – REGULATORY INFORMATION**

WHMIS Classification: (Workplace	No Data.				
Hazardous Material Information System)					
SARA Title III: (Superfund Amendments &	CAS No. CHEMICAL/COMPOUND % by WT % Element				
Reauthorization Act)	108-88-3 Toluene 4 Zinc 46				
OSHA: (Occupational Safety & Health Administration)	No Data.				
TSCA: (Toxic Substance Control Act)	All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.				
VOC: (volatile Organic Compounds)	Volatile Weight 48.52% Less Water and Federally Exempt Solvents				
CPR: (Canadian Controlled Products	This product has been classified in accordance with the hazard criteria of the Controlled Products				
Regulations)	Regulations.				
<b>EINECS:</b> (European Inventory of Existing Commercial Chemical Substances)	No Data.				
<b>DSL / NDSL:</b> (Canadian Domestic Substance List)(Non-Domestic Substance List)	No Data.				
CERCLA: (Comprehensive Response Compensation & Liability Act)	No Data.				
IDL: (Canadian Ingredient Disclosure List)	No Data.				
NFPA (HMIS) Rating: (Hazardous Materials	Health Hazard: 1				
Identification System)	Fire Hazard 2				
	Reactivity 0				
	Personal Protection: X				

# **SECTION 16 – OTHER INFORMATION**

CALIFORNIA PROPOSITION 65

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

The information contained herein is based on the data available to us and is believed to be correct. However, Nu-Calgon Wholesaler Inc. makes no warranty, expressed, or implied, regarding the accuracy of this data or the results to be obtained from the use thereof. Nu-Calgon Wholesaler Inc. assumes no liability for injury from the use of the product described herin.