

Safety Data Sheet: HY-ZINC AEROSOL

Supersedes Date 03/27/2014

Issuing Date 01/22/2015

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name HY-ZINC AEROSOL
Recommended use Corrosion inhibitor
Information on Manufacturer
CHEMSEARCH FE DIV. OF NCH CORP.
BOX 152170
IRVING, TX 75015

Product Code 5519
Chemical nature Solvent mixture
Emergency Telephone Number
CHEMTREC® 800-424-9300
Telephone inquiry
972-579-2477

2. HAZARD IDENTIFICATION

Color Dark gray

Physical State Liquid

Odor Aromatic

GHS

Classification

Physical Hazards

Flammable aerosols
Gases under pressure

Category 1
Compressed Gas

Health Hazard

Skin Corrosion/Irritation
Reproductive Toxicity
Specific target organ systemic toxicity (single exposure)
Specific target organ systemic toxicity (repeated exposure)

Category 2
Category 2
Category 3
Category 2

Other hazards

None

Labeling

Signal Word

DANGER



Hazard Statements

H222 - Extremely flammable aerosol
H336 - May cause drowsiness or dizziness
H315 - Causes skin irritation
H373 - May cause damage to organs through prolonged or repeated exposure
H361 - Suspected of damaging fertility or the unborn child
H280 - Contains gas under pressure; may explode if heated

Precautionary Statements

P202 - Do not handle until all safety precautions have been read and understood
P210 - Keep away from heat, sparks, open flames or hot surfaces.
P251 - Pressurized container: Do not pierce or burn, even after use
P211 - Do not spray on an open flame or other ignition source
P264 - Wash face, hands and any exposed skin thoroughly after handling.
P280 - Wear protective gloves, protective clothing and eye protection.
P260 - Do not breathe vapor, mist or gas
P271 - Use in a well-ventilated area.
P302+ P352 - IF ON SKIN: Wash with plenty of soap and water
P332 + P313 - If skin irritation occurs, get medical attention.
P362 - Take off contaminated clothing and wash before reuse
P304 + P340 - IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.
P312 - Call a physician if unwell.
P410 + P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed
P501 - Dispose of contents and container in accordance with applicable regulations.

46 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS-No	Weight %
Zinc	7440-66-6	30-60

Toluene	108-88-3	10-30
Propane	74-98-6	7-13
Isobutyl acetate	110-19-0	7-13
Butane	106-97-8	3-7
Mineral spirits	64742-47-8	1-5
Zinc oxide	1314-13-2	1-5
1-Methyl-2-pyrrolidinone	872-50-4	0.1-1

4. FIRST AID MEASURES

General advice	Avoid breathing vapors, mist, or gas. Avoid contact with skin, eyes and clothing.
Eye Contact	Rinse thoroughly with plenty of water, also under the eyelids. Get medical attention if irritation develops and persists.
Skin Contact	Wipe up with absorbent material (e.g. cloth, fleece). Wash off with soap and plenty of water. Get medical attention if irritation develops and persists. Wash contaminated clothing before re-use.
Inhalation	Move to fresh air. In case of shortness of breath, give oxygen. If breathing has stopped, apply artificial respiration. Get medical attention immediately.
Ingestion	Drink 1 or 2 glasses of water. Do NOT induce vomiting. Get medical attention if symptoms occur.
Notes to physician	Treat symptomatically

5. FIRE-FIGHTING MEASURES

Flash Point	-2 °F / -19 °C	Method	Tag closed cup
Flammability Limits in Air % Mixture.		Upper	10.5
Suitable Extinguishing Media		Lower	1.1
Carbon dioxide (CO2). Dry chemical. Water spray. Foam. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.			
Specific hazards arising from the chemical			
Extremely flammable. Solvent vapors are heavier than air and may spread along floors. Vapors may ignite and explode. Material can create slippery conditions.			
Protective Equipment and Precautions for Firefighters			
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.			
Aerosol Level (NFPA 30B) -	1		
NFPA	Health 2	Flammability 4	Instability 0
HMIS	Health 2	Flammability 4	Instability 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Use personal protective equipment. Ensure adequate ventilation. Take precautionary measures against static discharges. Remove all sources of ignition. Material can create slippery conditions.
Environmental Precautions	Do not flush into surface water or sanitary sewer system.
Methods for Containment	Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).
Methods for Cleaning Up	Use clean non-sparking tools to collect absorbed material. Pick up and transfer to properly labeled containers.
Neutralizing Agent	Not applicable.

7. HANDLING AND STORAGE

Handling	Keep away from open flames, hot surfaces and sources of ignition. Avoid breathing vapors, mist or gas. Avoid contact with skin, eyes and clothing.			
Storage	Keep away from heat and sources of ignition. Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place.			
Storage Temperature	Minimum	35 °F / 2 °C	Maximum	120 °F / 49 °C
Storage Conditions	Indoor	X	Outdoor	Heated
				Refrigerated

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH
Toluene	TWA: 20 ppm	TWA: 200 ppm Ceiling: 300 ppm	500 ppm STEL 150 ppm STEL 560 mg/m ³ TWA: 100 ppm

			TWA: 375 mg/m ³
Propane	TWA: 1000 ppm	TWA: 1000 ppm TWA: 1800 mg/m ³	2100 ppm TWA: 1000 ppm TWA: 1800 mg/m ³
Isobutyl acetate	TWA: 150 ppm	TWA: 150 ppm TWA: 700 mg/m ³	1300 ppm TWA: 150 ppm TWA: 700 mg/m ³
Butane	STEL: 1000 ppm	No data available	TWA: 800 ppm TWA: 1900 mg/m ³
Zinc oxide	TWA: 2 mg/m ³ respirable fraction STEL: 10 mg/m ³	TWA: 5 mg/m ³ fume TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction	500 mg/m ³ Ceiling: 15 mg/m ³ STEL 10 mg/m ³ TWA: 5 mg/m ³ dust and fume

Engineering Measures

Ensure adequate ventilation, especially in confined areas. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

Personal Protective Equipment**Eye/Face Protection**

Tightly fitting safety goggles.

Skin Protection

Wear suitable protective clothing, Impervious gloves.

Respiratory Protection

In case of insufficient ventilation wear suitable respiratory equipment. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

General Hygiene Considerations

Ensure that eyewash stations and safety showers are close to the workstation location. Remove and wash contaminated clothing before re-use. Do not eat, drink or smoke when using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid	Viscosity	Viscous
Color	Dark gray	Odor	Aromatic
Odor Threshold	Not applicable	Appearance	Opaque
pH	No data available	Specific Gravity	0.85
Evaporation Rate	>1 (BuAc=1,)	Percent Volatile (Volume)	>45
VOC Content (%)	45.4	VOC Content (g/L)	593.8
Vapor Pressure	2063 mmHg @ 0 °C	Vapor Density	> 1 (Air = 1)
Solubility	No information available	n-Octanol/Water Partition	No data available
Melting Point/Range	No data available	Decomposition Temperature	No data available
Boiling Point/Range	-166 °F / -110 °C	Flammability (solid, gas)	No data available
Flash Point	-2 °F / -19 °C	Method	Tag closed cup
Autoignition Temperature	No information available.		
Flammability Limits in Air %	Mixture.	Upper 10.5 Lower 1.1	

10. STABILITY AND REACTIVITY

Chemical Stability
Conditions to Avoid

Stable under normal conditions.
Keep away from open flames, hot surfaces, and sources of ignition, Temperatures above 120 °F .

Incompatible Products

No materials to be especially mentioned

Hazardous Decomposition Products

None under normal use

Possibility of Hazardous Reactions

None under normal processing

11. TOXICOLOGICAL INFORMATION

Product Information

No information available.

The following values are calculated based on chapter 3.1 of the GHS document (Rev. 3, 2009):

Oral LD50	No information available
Dermal LD50	No information available
Inhalation LC50	
Gas	No information available
Mist	No information available
Vapor	No information available

Principle Route of Exposure

Eye contact, Skin contact, Inhalation.

Primary Routes of Entry

Inhalation, Skin Absorption.

Acute Effects**Eyes**

May cause eye irritation.

Skin

Causes skin irritation. May be absorbed through the skin in harmful amounts.

Inhalation

Inhalation may cause central nervous system effects. May cause central nervous system depression. Symptoms and signs include headache, dizziness, fatigue, muscular weakness,

Ingestion
Chronic Toxicity

drowsiness and in extreme cases, loss of consciousness.

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

May cause damage to organs through prolonged or repeated exposure if inhaled. May cause damage to the kidneys/liver/eyes/brain/respiratory system/central nervous system if inhaled. Liver and kidney injuries may occur. Suspect reproductive hazard - contains material which may injure unborn child.

Target Organ Effects

Central nervous system, Heart, Eyes, Kidney, Liver, Respiratory system, Skin, Reproductive System, Spleen, Adrenal gland.

Aggravated Medical Conditions

Neurological disorders, Kidney disorders, Liver disorders, Respiratory disorders.

Component Information

Acute Toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation	Draize Test	Other
Toluene	= 636 mg/kg (Rat)	= 8390 mg/kg (Rabbit) = 12124 mg/kg (Rat)	= 12.5 mg/L (Rat) 4 h > 26700 ppm (Rat) 1 h	no data available	no data available
Propane	no data available	no data available	= 658 mg/L (Rat) 4 h	no data available	no data available
Isobutyl acetate	= 15400 mg/kg (Rat)	> 17400 mg/kg (Rabbit)	no data available	no data available	no data available
Butane	no data available	no data available	= 658 g/m ³ (Rat) 4 h	no data available	no data available
Mineral spirits	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 5.2 mg/L (Rat) 4 h	no data available	no data available
Zinc oxide	> 5000 mg/kg (Rat)	no data available	no data available	no data available	no data available
1-Methyl-2-pyrrolidinone	= 3598 mg/kg (Rat)	= 8 g/kg (Rabbit)	= 3.1 mg/L (Rat) 4 h	no data available	no data available

Component	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects
Toluene	no data available	no data available	yes	yes	CNS, eyes, kidneys, liver, respiratory system, skin, reproductive system
Propane	no data available	no data available	no data available	no data available	CNS, heart
Isobutyl acetate	no data available	no data available	no data available	no data available	eyes, CNS, respiratory system, skin
Butane	no data available	no data available	no data available	no data available	CNS, heart
Zinc oxide	no data available	no data available	no data available	no data available	respiratory system
1-Methyl-2-pyrrolidinone	no data available	no data available	no data available	no data available	Respiratory system, spleen, adrenal gland, kidney, liver

Carcinogenicity

Component	ACGIH	IARC	NTP	OSHA	Other
Toluene	not applicable	Group 3	not applicable	not applicable	not applicable

12. ECOLOGICAL INFORMATION

Product Information

No information available.

Component Information

Component	Toxicity to Algae	Toxicity to Fish	Microtox	Water Flea	log Pow
Zinc	EC50 0.09 - 0.125 mg/L Pseudokirchneriella subcapitata 72 h EC50 0.11 - 0.271 mg/L Pseudokirchneriella subcapitata 96 h	LC50 0.211 - 0.269 mg/L Pimephales promelas 96 h LC50 2.16 - 3.05 mg/L Pimephales promelas 96 h LC50 = 0.24 mg/L Oncorhynchus mykiss 96 h LC50 = 0.41 mg/L Oncorhynchus mykiss 96 h LC50 = 0.45 mg/L Cyprinus carpio 96 h LC50 = 0.59 mg/L Oncorhynchus mykiss 96 h LC50 = 2.66 mg/L Pimephales promelas 96 h LC50 = 3.5 mg/L Lepomis macrochirus 96 h LC50 = 30 mg/L Cyprinus carpio 96 h LC50 = 7.8 mg/L Cyprinus carpio 96 h	no data available	0.139 - 0.908: 48 h Daphnia magna mg/L EC50 Static	N/A
Toluene	EC50 = 12.5 mg/L Pseudokirchneriella subcapitata 72 h EC50 > 433 mg/L Pseudokirchneriella subcapitata 96 h	LC50 11.0 - 15.0 mg/L Lepomis macrochirus 96 h LC50 14.1 - 17.16 mg/L Oncorhynchus mykiss 96 h LC50 15.22 - 19.05 mg/L Pimephales promelas 96 h LC50 5.89 - 7.81 mg/L	EC50 = 19.7 mg/L 30 min	5.46 - 9.83: 48 h Daphnia magna mg/L EC50 Static 11.5: 48 h Daphnia magna mg/L EC50	2.65

		Oncorhynchus mykiss 96 h LC50 50.87 - 70.34 mg/L Poecilia reticulata 96 h LC50 = 12.6 mg/L Pimephales promelas 96 h LC50 = 28.2 mg/L Poecilia reticulata 96 h LC50 = 5.8 mg/L Oncorhynchus mykiss 96 h LC50 = 54 mg/L Oryzias latipes 96 h			
Propane	no data available	no data available	no data available	no data available	2.3
Isobutyl acetate	no data available	no data available	no data available	no data available	1.72
Butane	no data available	no data available	no data available	no data available	2.89
Mineral spirits	no data available	LC50 = 2.2 mg/L Lepomis macrochirus 96 h LC50 = 2.4 mg/L Oncorhynchus mykiss 96 h LC50 = 45 mg/L Pimephales promelas 96 h	no data available	no data available	N/A
1-Methyl-2-pyrrolidinone	EC50 > 500 mg/L Desmodesmus subspicatus 72 h	LC50 = 1072 mg/L Pimephales promelas 96 h LC50 = 1400 mg/L Poecilia reticulata 96 h LC50 = 832 mg/L Lepomis macrochirus 96 h	no data available	4897: 48 h Daphnia magna mg/L EC50	-0.46

Persistence and Degradability
Bioaccumulation
Mobility

No information available.
No information available.
No information available.

13. DISPOSAL CONSIDERATIONS

Product Disposal	Dispose of in accordance with local regulations.
Container Disposal	Contents under pressure. Do not puncture. Empty remaining contents. Empty containers should be taken for local recycling, recovery, or waste disposal.

14. TRANSPORT INFORMATION

DOT	
Proper Shipping Name	Consumer commodity
Hazard Class	ORM-D
Description	Consumer commodity, ORM-D
TDG	
Proper shipping name	Aerosols
Hazard Class	2.1
UN-No	UN1950
ICAO	
UN-No	UN1950
Proper Shipping Name	Aerosols, flammable
Hazard Class	2.1
Shipping Description	UN1950, AEROSOLS,2.1, LTD QTY
IATA	
UN-No	UN1950
Proper Shipping Name	Aerosols, flammable
Hazard Class	2.1
ERG Code	10L
Shipping Description	UN1950, AEROSOLS,2.1, LTD QTY
IMDG/IMO	
Proper Shipping Name	Aerosols
Hazard Class	2.1
UN-No	UN1950
EmS No.	F-D, S-U
Shipping Description	UN1950, AEROSOLS,2.1, LTD QTY

15. REGULATORY INFORMATION

Inventories**TSCA**

Does not Comply

DSL

Does not Comply

U.S. Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Component	CAS-No	Weight %	SARA 313 - Threshold Values
Zinc	7440-66-6	30-60	1.0
Toluene	108-88-3	10-30	1.0
Zinc oxide	1314-13-2	1-5	1.0
1-Methyl-2-pyrrolidinone	872-50-4	0.1-1	1.0

SARA 311/312 Hazardous Categorization

Acute Health Hazard	Chronic Health Hazard	Fire Hazard	Sudden Release of Pressure Hazard	Reactive Hazard
Yes	Yes	Yes	Yes	No

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs
Zinc	1000 lb	Not applicable
Toluene	1000 lb	Not applicable
Isobutyl acetate	5000 lb	Not applicable

16. OTHER INFORMATION

Prepared By

Brittany Wilson

Supersedes Date

03/27/2014

Issuing Date

01/22/2015

Reason for Revision

No information available.

Glossary

No information available.

List of References.

No information available.

CHEMSEARCH FE DIV. OF NCH CORP. assumes no responsibility for personal injury or property damage caused by the use, storage, or disposal of the product in a manner not recommended on the product label. Users assume all risks associated with such unrecommended use, storage or disposal of the product. The information provided on this document is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.