HAVILAND PRODUCTS COMPANY SAFETY DATA SHEET



Section 1: Identification

Product Name: HPC Zinc Sol Product Code:H000899

Haviland Products Company 421 Ann Street NW Grand Rapids, MI 49504 (616) 361-6691

Emergency Phone CHEMTREC (800) 424-9300 CHEMTREC International (703) 527-3887

Product Use: NA

Not recommended for: NA

Section 2: Hazard(s) Identification

GHS Ratings:

Corrosive to metals	1	Corrosive to metals
	1 4 4	
Skin corrosive	1A	Destruction of dermal tissue: Exposure < 3 min. Observation
		< 1 hour, visible necrosis in at least one animal
Eye corrosive	1	Serious eye damage: Irreversible damage 21 days after
		exposure, Draize score: Corneal opacity >= 3, Iritis > 1.5
Reproductive toxin	2	Human or animal evidence possibly with other information
Organ toxin single exposure	1	Significant toxicity in humans- Reliable, good quality human
		case studies or epidemiological studies, Presumed
		significant toxicity in humans- Animal studies with significant
		and/or severe toxic effects relevant to humans at generally
		low exposure (guidan
Organ toxin repeated	1	Significant toxicity in humans- Reliable, good quality human
exposure		case studies or epidemiological studies Presumed
одровато		significant toxicity in humans- Animal studies with significant
		and/or severe toxic effects relevant to humans at generally
		low exposure (guidanc
Aquatic toxicity	A1	Acute toxicity <= 1.00 mg/l

GHS	Hazards

H290	May be corrosive to metals
H314	Causes severe skin burns and
	eye damage
H318	Causes serious eye damage
H361	Suspected of damaging fertility or
	the unborn child
H370	Causes damage to organs
H372	Causes damage to organs
	through prolonged or repeated
	exposure
H400	Very toxic to aquatic life

GHS Precautions

P201	Obtain special instructions before use
P202	Do not handle until all safety
	precautions have been read and
	understood
P234	Keep only in original container
	, , ,
P260	Do not breathe
	dust/fume/gas/mist/vapors/spray
P264	Wash face, hands, and any exposed
	skin thoroughly after handling
P270	Do not eat, drink or smoke when using
	this product
P273	Avoid release to the environment
P280	Wear protective gloves/protective
	clothing/eye protection/face protection
P281	Use personal protective equipment as
	required
	required

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P310	Immediately call a POISON CENTER or
	doctor/physician
P314	Get Medical advice/attention if you feel unwell
P321	Specific treatment (see first aid
	treatment on SDS)
P363	Wash contaminated clothing before
	reuse
P390	Absorb spillage to prevent material
	damage
P391	Collect spillage
P301+P330+P33	IF SWALLOWED: Rinse mouth. Do
1	NOT induce vomiting
P303+P361+P35	•
3	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing.
3	Rinse skin with water/shower
P304+P340	IF INHALED: Remove victim to fresh air
1 304 11 340	
	and keep at rest in a position
P305+P351+P33	comfortable for breathing
8	IF IN EYES: Rinse cautiously with water for several minutes. Remove
0	
	contact lenses if present and easy to
P307+P311	do – continue rinsing
1 307 11 311	IF exposed: Call a POISON CENTER or
P308+P313	doctor/physician
F300+F313	IF exposed or concerned: Get medical
P405	advice/attention
	Store locked up
P406	Store in a corrosive resistant container
DE04	with a resistant inner liner
P501	Dispose of contents/container in
	accordance with
	local/regional/national/international
	regulations

Danger



Section 3: Composition/Information on Ingredients

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Trade Secret 30 to 40%	2 mg/m3 TWA	2 mg/m3 Ceiling	NIOSH: 2 mg/m3 Ceiling
Trade Secret 10 to 20%	5 mg/m3 TWA (fume); 15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)	_	NIOSH: 5 mg/m3 TWA (dust and fume) 15 mg/m3 Ceiling (dust) 10 mg/m3 STEL (fume)

Section 4: First-aid Measures

Inhalation

Rescuers should put on appropriate protective gear. Remove from area of exposure. If not breathing,

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give artificial respiration. If breathing is difficult, give oxygen. Keep victim warm. Get immediate medical attention. To prevent aspiration, keep head below knees.

Eye Contact

Immediately flush eyes with water. Flush eyes with water for a minimum of 15 minutes, occasionally lifting and lowering upper lids. Get medical attention promptly.

Skin Contact

Remove contaminated clothing. Wash skin with soap and water. Get medical attention. Wash clothing separately and clean shoes before reuse.

Ingestion

If swallowed, do NOT induce vomiting. Give victim a glass of water. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

Section 5: Fire-fighting Measures

LEL: UEL:

Extinguishing Media

Water spray, foam, carbon dioxide, dry chemical $% \left(1\right) =\left(1\right) \left(1\right$

Specific Hazards Arising from the Chemical

Reaction with metals may produce flammable hydrogen gas.

Special Protective Equipment and Precautions for Firefighters

Special Information: As in any fire, wear self-contained breathing apparatus pressure-demand (MSHA/NIOSH approved or equivalent) and full protective gear.

Section 6: Accidental Release Measures

Spill and Leak Procedures

Carefully mop up. Neutralize final traces with a dilute acid. Flush area with water.

Section 7: Handling and Storage

HANDLING: Use only in a well ventilated area. Avoid breathing vapor, fumes or mist. Avoid contact with eyes, skin, and clothing. Ground and bond containers when transferring material. Always open containers slowly to allow any excess pressure to vent. Follow all MSDS/label precautions even after containers are emptied because they may retain product residues.

STORAGE: Keep away from heat, sparks, and flame. Store containers in a cool, well ventilated place. Keep container closed when not in use. Protect from direct sunlight.

Section 8: Exposure Control/Personal Protection

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Trade Secret	2 mg/m3 TWA	2 mg/m3 Ceiling	NIOSH: 2 mg/m3 Ceiling
N/A			
Trade Secret	5 mg/m3 TWA (fume); 15	10 mg/m3 STEL (respirable	NIOSH: 5 mg/m3 TWA
N/A	mg/m3 TWA (total dust); 5	fraction)	(dust and fume)
	mg/m3 TWA (respirable	2 mg/m3 TWA (respirable	15 mg/m3 Ceiling (dust)
	fraction)	fraction)	10 mg/m3 STEL (fume)

RESPIRATORY PROTECTION: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant the use of a respirator.

SKIN PROTECTION: Wear impervious protective gloves. Wear protective gear as needed - apron, suit, boots.

EYE PROTECTION: Wear safety glasses with side shields (or goggles) and a face shield.

OTHER PROTECTIVE EQUIPMENT: Facilities storing or utilizing this material should be equipped with an

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eyewash facility and a safety shower.

HYGENIC PRACTICES: Do not eat, drink, or smoke in areas where this material is used. Avoid breathing vapors. Remove contaminated clothing and wash before reuse. Wash thoroughly after handling. Wash hands before eating.

Section 9: Physical and Chemical Properties

Appearance: Clear colorless liquid

Vapor Pressure: Unknown
Vapor Density: Unknown

Density: Unknown

Freezing point: Unknown

Boiling range: > 100°C

Evaporation rate: Unknown

Explosive Limits: Unknown

Autoignition temperature: Unknown

Viscosity: Unknown

Odor: No odor

Odor threshold: Unknown

pH: Unknown

Melting point: Unknown

Solubility: Complete

Flash point: Unknown

Flammability: Unknown

Specific Gravity 1.5

Decomposition temperature: Unknown

Grams VOC less water: Unknown

Section 10: Stability and Reactivity

Chemical Stability:

STABLE

Incompatibile Materials

Acids. Metals. Halogens. Avoid contact with organic nitro compounds.

Conditions to Avoid

None

Hazardous Decomposition Products

Decomposition by reaction with certain metals releases flammable and explosive hydrogen gas.

Hazardous Polymerization

Hazardous polymerization will not occur.

Section 11: Toxicology Information

Mixture Toxicity

Dermal Toxicity LD50: 4,051mg/kg

Component Toxicity

Routes of Entry:

Inhalation

Ingestion

Skin contact

Eye contact

Eyes Skin Respiratory System

Effects of Overexposure

Emergency Overview

Corrosive to eyes and skin, solids or concentrated solutions can destroy tissue on contact. Harmful if swallowed or inhaled.

Acute Health Effects

Eye or skin contact may cause burning or stinging sensation. Inhalation may cause irritation

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CAS Number Description % Weight Carcinogen Rating

Section 12: Ecological Information

Component Ecotoxicity

Trade Secret 96 Hr LC50 Oncorhynchus mykiss: 45.4 mg/L [static]

Section 13: Disposal Considerations

Dispose of in accordance with local, state and federal regulations.

Section 14: Transportation Informations

Refer to Bill of Lading or container label for DOT or other transportation hazard classification, if any.

Section 15: Regulatory Information

CERCLA/SARA Hazardous Substances

Trade Secret

TSCA 8(b) Inventory

Trade Secret Trade Secret

Country Regulation All Components Listed

Section 16: Other Information

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Disclaimer

Reviewer Revision

The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its affiliates or subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our SDS are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated SDS for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.

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