Date: 08/13/2015
Revision: 00

Safety Data Sheet
Stain and Scale Defense

Section 1: Identification

Product Identifier: Stain and Scale Defense

Other Means of Identification:

Recommended Use: Industrial scale inhibitor

Manufacturer's Name: Spec Chem Direct, Inc.

Corporate Address: 6506 S 209th St., Kent, WA, 98032

Manufacturer's Telephone: (253) 277-3143 (Monday-Friday, 8AM-5PM PT)

Emergency Phone Number: (253) 277-3143 (Monday-Friday, 8AM-5PM PT)

Section 2: Hazard(s) Identification

Hazard Classification: Irritating To Eyes and Skin

Signal Word: WARNING

Hazard statement(s):
May be corrosive to metals
Causes skin irritation
Causes eye irritation
May cause respiratory irritation
Harmful to aquatic life

Pictograms:

Precautionary Statement(s): Keep out of reach of children. Do not get in eyes, on skin, or on clothing. Wash contacted areas thoroughly after handling. Avoid release to the environment. Wear protective gloves, protective clothing and eye or face protection.

Hazards Not Otherwise Classified: N/A

Ingredient(s) With Unknown Toxicity: 0% of the mixture consists of ingredient(s) with unknown acute toxicity.

Section 3: Composition/Information on Ingredients

Ingredients	% by weight	CAS #
Sodium Hydroxide	< 2%	1310-73-2
Other Non-Hazardous Ingredients	to 100%	Trade Secret

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non-hazardous ingredients are also possible.

Impurities and Stabilizing Additives, Which Are Themselves Classified and Which Contribute to the Classification of the Chemical: None

The Chemical Name and Concentration of All Ingredients Which Are Classified As Health Hazards and Are Present Above Their Cut-Off/Concentration Limits or Present a Health Risk Below the Cut-Off/Concentration Limits: None

Chemicals Where a Trade Secret Is Claimed: The balance of this product contains non-hazardous ingredients.

Section 4: First-Aid Measures

Inhalation: No first aid measures normally required. However, if inhalation has occurred, and irritation has developed, remove to fresh air and observe until recovered. If irritation becomes painful or persists more than about 30 minutes, seek medical advice.

Skin: Wash gently and thoroughly with warm water (use non-abrasive soap if necessary) for 10-20 minutes or until product is removed. Under running water, remove contaminated clothing, shoes and leather goods (e.g. watchbands and belts) and completely decontaminate them before reuse or discard. If irritation persists, repeat flushing and seek medical attention.

Eyes: Remove contact lenses (if applicable). Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 20 minutes or until the product is removed, while holding the eyelid(s) open. Take care not to rinse contaminated water into the unaffected eye or onto the face. Obtain medical attention immediately.

Ingestion: If swallowed, do NOT induce vomiting. Wash mouth with water and contact a Poison Information Center, or call a doctor.

Most Important Symptoms or Effects, and Any Symptoms That Are Acute or Delayed: N/A

Recommendations for Immediate Medical Care and Special Treatment Needed, When Necessary: N/A

Section 5: Fire-Fighting Measures

Suitable / Unsuitable Extinguishing Equipment: Not combustible. Use extinguishing media suited to burning materials.

Specific Hazards: The major hazard in fires is usually inhalation of heated and toxic or oxygen deficient (or both), fire gases. There is no risk of an explosion from this product under normal circumstances if it is involved in a fire. Only small quantities of decomposition products are expected from this product at temperatures normally achieved in a fire. This will only occur after heating to dryness. Fire decomposition products from this product are likely to be harmful if inhaled. Take suitable protective measures.

Special Protective Equipment or Precautions for Fire Fighters: Self-contained breathing apparatus and protective clothing should be worn in fighting fires involving chemicals.

Section 6: Accidental Release Measures

Personal Precautions: Refer to Section 8: Exposure Controls/Personal Protection and Section 7: Handling and Storage.

Emergency Procedures: None.

Methods and Materials for Containment and Cleanup: Absorb onto sand, vermiculite or other suitable absorbent material. If spill is too large or if absorbent material is not available, try to create a dike to stop material spreading or going into drains or waterways. Sweep up and shovel or collect recoverable product into

labelled containers for recycling or salvage, and dispose of promptly. Recycle containers wherever possible after careful cleaning. After spills, wash area preventing runoff from entering drains. Contaminated area may be neutralized by washing with weak or dilute acid. Vinegar, citrus juice and most soft drinks may be suitable. Dispose of per guidelines under Section 13: Disposal Considerations.

Section 7: Handling and Storage

Handling: Keep exposure to this product to a minimum, and minimize the quantities kept in work areas. Avoid contact with eyes, skin, and clothing. User should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. User should remove clothing/PPE immediately if product gets inside. Then wash thoroughly and put on clean clothing. Users should remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing. Wash the outside of gloves before removing. Follow manufacturer's instructions for cleaning/maintaining PPE. If not such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

Storage: Make sure that containers of this product are kept tightly closed. Store in original container in a cool, dry and well ventilated area away from direct heat. Make sure that the product does not come into contact with acids, strong oxidizing agents, reducing agents, zinc, tin, aluminum and their alloys.

Section 8: Exposure Controls/Personal Protection

OSHA Permissible Exposure Limits (PELs): Unknown.

American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLVs): Unknown.

Any Other Exposure Limit Used or Recommended: Sodium Hydroxide TWA (mg/m^3) 2 and STEL (mg/m^3) Peak.

The TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure value that should not be exceeded for more than 15 minutes and should not be repeated for more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

Appropriate Engineering Controls: No special ventilation requirements are normally necessary for this product. However make sure that the work environment remains clean and that vapors and mists are minimized.

Individual Protection Measures (Personal Protective Equipment – PPE): Protective glasses or goggles should be worn when this product is being used. Failure to protect your eyes may cause them harm. Emergency eye wash facilities are also recommended in an area close to where this product is being used. Prevent skin contact by wearing impervious gloves, clothes and, preferably, apron. Make sure that all skin areas are covered. We suggest that protective clothing be made from the following materials: rubber, Viton, nitrile, butyl rubber, Barricade, neoprene, Teflon, polyethylene, PE/EVAL, Saranex, Responder. Usually, no respirator is necessary when using this product. Eyebaths or eyewash stations and safety deluge showers should, if practical, be provided near to where this product is being handled commercially.

Section 9: Physical and Chemical Properties

Appearance: Clear colorless liquid.

Odor: Mild ammonia odor.

Odor threshold: No data available.

pH: >12 (as supplied)

Melting Point/Freezing Point: Below -5°C.

Initial Boiling Point and Boiling Range: Approximately 100°C at 100kPa.

Flash Point: Does not burn.

Evaporation Rate: As for water.

Flammability (Solid, Gas): Does not burn.

Upper/Lower Flammability or Explosive Limits: Does not burn.

Vapor Pressure: 2.37 kPa at 20°C (water vapor pressure).

Vapor Density: As for water.

Relative Density: 1.33

Solubility(ies): Completely soluble in water.

Partition Coefficient (n-octanol/water): No data available.

Auto-ignition Temperature: Not applicable - does not burn.

Decomposition Temperature: No data available.

Viscosity: No data available.

NOTE: *These physical data are typical values based on material tested but may vary from sample to sample. Values should not be construed as a guaranteed analysis of any specific lot or as specifications.*

Section 10: Stability and Reactivity

Reactivity: Material is stable under normal temperatures.

Chemical Stability: Material is stable under normal temperatures.

Possibility of Hazardous Reactions: Hazardous Polymerization will not occur.

Conditions to Avoid: Keep containers tightly closed.

Incompatible Materials: Acids, strong oxidizing agents, reducing agents, zinc, tin, aluminum and their alloys.

Hazardous Decomposition Products: Only small quantities of decomposition products are expected from this product at temperatures normally achieved in a fire. This will only occur after heating to dryness. Combustion forms carbon dioxide, and if incomplete, carbon monoxide and possibly smoke. Water is also formed. Sodium and nitrogen compounds. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death.

Section 11: Toxicological Information

Likely Routes of Exposure (Inhalation, Ingestion, Skin and Eye Contact) and Delayed, Immediate, or Chronic Effects from Short- and Long-Term Exposure:
Inhalation:
Short term exposure: Available data indicates that this product is not harmful. However product may be mildly irritating, although unlikely to cause anything more than mild transient discomfort.
Long Term exposure: No data for health effects associated with long term inhalation.

Skin Contact:
Short term exposure: Available data indicates that this product is not harmful. It should present no hazards in normal use. However product is a skin irritant. Symptoms may include itchiness and reddening of contacted skin. Other symptoms may also become evident, but all should disappear once exposure has ceased.
Long Term exposure: No data for health effects associated with long term skin exposure.

Eye Contact:
Short term exposure: This product is an eye irritant. Symptoms may include stinging and reddening of eyes and watering which may become copious. Other symptoms may also become evident. If exposure is brief, symptoms should disappear once exposure has ceased. However, lengthy exposure or delayed treatment may cause permanent damage.
Long Term exposure: No data for health effects associated with long term eye exposure.

Ingestion:
Short term exposure: Significant oral exposure is considered to be unlikely. However, this product is an oral irritant. Symptoms may include burning sensation and reddening of skin in mouth and throat. Other symptoms may also become evident, but all should disappear once exposure has ceased.
Long Term exposure: No data for health effects associated with long term ingestion.

Numerical Measures of Toxicity:

Oral LD_{50}: Not available.
Dermal LD_{50}: Not available.
Inhalation LC_{50}: Not available.

Description of the symptoms: No data available.

Carcinogenicity (NTP, IARC, or OSHA): This product is not known or reported to be carcinogenic by any reference source including NTP, IARC, or OSHA.

Section 12: Ecological Information (non-mandatory)

Ecotoxicity: Insufficient data to be sure of status. However, until diluted or neutralized it will kill all aquatic organisms it contacts due to extreme pH.

Persistence and Degradability: Unknown.

Bioaccumulative Potential: Unknown.

Mobility in Soil: Unknown.

Other Adverse Effects: Unknown.

Section 13: Disposal Considerations (non-mandatory)

Appropriate Disposal Containers: Containers should be emptied as completely as practical before disposal. If possible, recycle product and containers either in-house or send to recycle company. If this is not practical, send to a commercial waste disposal site.

Recommended Appropriate Disposal Methods: Can be disposed of with household waste.

Physical and Chemical Properties That May Affect Disposal Activities: None.

Special Precautions for Landfills or Incineration Activities: None.

Do not dispose of into sewer.

If this product as supplied becomes a waste, it does not meet the criteria of a hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Please be advised that state and local requirements for waste disposal may be more restrictive or otherwise different from federal regulations. Consult state and local regulations regarding the proper disposal of this material.

To minimize exposure, refer to Section 8: Exposure Controls/Personal Protection

Section 14: Transport Information (non-mandatory)

UN Number: Not regulated.

UN Proper Shipping Name: Not regulated.

Transport Hazard Class(es): Not regulated.

Packing Group Number, if Applicable: Not regulated.

Environmental Hazards (e.g., Marine pollutant (Yes/No)): No.

Transport in Bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Not applicable.

Special Precautions Which a User Needs to Be Aware of, or Needs to Comply With, in Connection With Transport or Conveyance Either Within or Outside Their Premises: None.

Section 15: Regulatory Information (non-mandatory)

National and/or Regional Regulatory Information of the Chemical or Mixtures (Including Any OSHA, Department of Transportation, Environmental Protection Agency, or Consumer Product Safety Commission Regulations):

TSCA: Not listed on the TSCA inventory.

CERCLA Reportable Quantity (RQ): None of the ingredients is listed.

OSHA: Not considered hazardous.

EPA: Exempt from EPA code.

SARA Section 302: Does not have an RQ or TPQ.

SARA Section 311/312: Not reportable under Section 311/312.

SARA Section 313: Not reportable under Section 313.

California Proposition 65: Not applicable.

Section 16: Other Information

REVISION INFORMATION:
SDS sections(s) changed since last revision of document:
00 08/13/2015 Original SDS Document

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