

**SPARTAN CHEMICAL COMPANY, INC.
WHMIS MATERIAL SAFETY DATA SHEET**

SECTION I: PRODUCT INFORMATION

PRODUCT IDENTIFIER:

CLOTHESLINE FRESH RUST & IRON REMOVER [S3]

PRODUCT USE: Rust stain remover for laundry

MANUFACTURER'S NAME & ADDRESS
Spartan Chemical Company, Inc.
1110 Spartan Drive, Maumee, OH 43537 USA

MEDICAL EMERGENCY TELEPHONE
888/314-6171 (24 Hours)
PRODUCT INFORMATION: 800/537-8990

SECTION II: HAZARDOUS INGREDIENTS

CAS REGISTRY NO.	% W	CHEMICAL NAME(S)	TLV			LD50	LC50
			TWA mg/m ³	STEL mg/m ³	Ceiling mg/m ³		
1341-49-7	1-5	Ammonium bifluoride	2.5 (Fluorine)	---	---	Not available	Not available
77-92-9	1-5	Citric acid	---	Not Established	----	Not available	Not available

SECTION III: PHYSICAL DATA

BOILING POINT 100°C (212°F)	SPECIFIC GRAVITY (H₂O = 1) 1.020	PERCENT SOLID BY WEIGHT 5-10%
VAPOUR PRESSURE Not established	EVAPORATION RATE (butyl acetate = 1) < 1	FREEZING POINT Not available
VAPOUR DENSITY (AIR = 1) Not established	SOLUBILITY IN WATER Complete	ODOUR THRESHOLD Not available
pH 4.0-4.5	APPEARANCE AND ODOUR Clear liquid, mild odor	PHYSICAL STATE GAS__ LIQUID <u>X</u> SOLID_____
COEFFICIENT OF WATER/OIL DISTRIBUTION Not available		

SECTION IV: FIRE & EXPLOSION DATA

FLASH POINT > 100°C (212°F)	METHOD USED ASTM - D56	FLAMMABLE LIMITS Not available
EXTINGUISHING MEDIA Water, CO ₂ or dry chemical	CONDITIONS OF FLAMMABILITY Not applicable	AUTO-IGNITION TEMPERATURE Not applicable
HAZARDOUS COMBUSTION PRODUCTS Hydrofluoric acid, ammonia		EXPLOSION DATA Not applicable
SPECIAL FIRE FIGHTING PROCEDURES Use self-contained breathing apparatus for maximum respiratory protection. Water may be used to cool containers if not ruptured or leaking.		
UNUSUAL FIRE AND EXPLOSION HAZARDS Product does not support combustion. Use extinguishing media appropriate for surrounding fire.		

SECTION V: REACTIVITY DATA

STABILITY: STABLE X

CONDITIONS OF INSTABILITY

Not established

CONDITIONS OF REACTIVITY

Not established

INCOMPATIBILITY (MATERIALS TO AVOID) Strong acids and strong bases, dissolves silicate containing materials such as glass and cement. Reacts with metals.

HAZARDOUS DECOMPOSITION PRODUCTS hydrofluoric acid, ammonia

SECTION VI: TOXICOLOGICAL PROPERTIES

PRIMARY ROUTES OF ENTRY: Eye Contact, Skin Contact, Ingestion, Inhalation,

EXPOSURE LIMIT Not established for mixture.

EFFECTS OF ACUTE EXPOSURE:

EYE CONTACT Causes severe eye damage and chemical burns. Permanent eye damage is possible.

SKIN CONTACT Causes severe skin damage or irritation with symptoms of pain, redness and chemical burns.

May be absorbed through the skin in harmful amounts. Harmful contact may not cause immediate pain.

INGESTION Harmful or fatal if swallowed. Causes damage or chemical burns to esophagus and mucous membranes with symptoms of pain, nausea, vomiting and diarrhea.

INHALATION Breathing product mist may cause respiratory tract irritation or damage and other toxic effects with symptoms of coughing and difficulty breathing. Inhalation of high concentrations presents a risk of chemical pneumonia and/or pulmonary edema. Contains ammonium bifluoride. Absorption by skin contact, ingestion, inhalation or other means may result in hypocalcemia (possible life threatening lowering of serum calcium calcium) with nervous disorders (tetany) and cardiac arrhythmia.

EFFECTS OF CHRONIC EXPOSURE

Chronic exposure to ammonium bifluoride can cause bone or dental fluorosis.

IRRITANCY OF PRODUCT

CORROSIVE (see above)

SENSITIZATION TO PRODUCT

Not available

CARCINOGENICITY

No

REPRODUCTIVE TOXICITY

Not available

TERATOGENICITY

Not available

MUTAGENICITY

Not available

SYNERGISTIC PRODUCTS

Not available

SECTION VII: PREVENTIVE MEASURE

PERSONAL PROTECTIVE EQUIPMENT / ENGINEERING CONTROLS

Wear nitrile rubber or other impervious gloves and splash goggles when handling product. Do not use latex gloves. Eyewash stations and washing facilities should be readily accessible in areas where product is handled. See 29 CFR 1910.132-138 for further guidance.

Provide good general ventilation. Local exhaust ventilation may be necessary for some operations. If exposure limits (see Section II) can not be maintained by ventilation, use of a NIOSH approved respirator suitable for the conditions of use and chemicals in Section II should be considered. Respiratory protection is not expected to be needed with normal use.

LEAK AND SPILL PROCEDURE Contain spill with inert material and transfer to appropriate container for disposal. Keep spill out of storm sewers and waterways.

WASTE DISPOSAL METHOD Assure conformance with regulations.

HANDLING PROCEDURES Do not get in eyes or on skin. Do not get on clothing that is being worn. Do not apply product by spraying. Avoid breathing product mist. Do not swallow. Use with adequate ventilation. Wash thoroughly after handling.

STORAGE REQUIREMENTS Keep container closed when not in use. Store in a cool, dry place. Do not freeze. Keep out of reach of children.

SPECIAL SHIPPING INFORMATION Corrosive liquids, n.o.s., 8, UN 1760, III, (contains ammonium hydrogendifluoride solution)

SECTION VIII: FIRST AID MEASURES

EYES: Immediately flush eyes with water for at least 15 minutes. Remove contact lenses. Get medical attention.

SKIN: Remove contaminated clothing and shoes. Rinse skin immediately with plenty of water for at least 15 minutes.

Apply 2.5% calcium gluconate gel if available and rub into area using rubber gloves. Get medical attention immediately.

Wash contaminated clothing before reuse. Destroy contaminated shoes.

INGESTION: Get medical attention immediately. Do not induce vomiting. Drink a glass of milk or water to dilute product. Antacids such as calcium carbonate or milk of magnesia may also be given by mouth. Such solutions can be beneficial but also may be problematic if they induce vomiting. Do not give anything by mouth to an unconscious person.

INHALATION: Move person to fresh air. Get medical attention if irritation persists.

Note to Physician: Consider administration of 1% calcium gluconate if swallowed. Gastric lavage with calcium gluconate may be considered.

SECTION IX: PREPARATION INFORMATION

CLOTHESLINE FRESH RUST & IRON REMOVER [S3]

DATE OF PREPARATION: March 20, 2014

SUPERCEDES: March 7, 2011

PREPARED BY Ronald T. Cook / Manager, Regulatory Affairs / Spartan Chemical Company, Inc.

TELEPHONE NUMBER 800/537-8990