

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

SECTION I: PRODUCT INFORMATION

PRODUCT IDENTIFIER:
LIQUID STEAM CLEANER

PRODUCT USE: Detergent for Use in Steam Cleaning Equipment

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		
6834-92-0	5-10	Sodium metasilicate	----	Not Established	----	Not available	Not available
7758-29-4	1-5	Sodium tripolyphosphate	----	Not Established	----	Not available	Not available
1310-58-3	1-5	Potassium hydroxide	---	---	2	Not available	Not available
68130-47-2	1-5	Phosphate ester	----	Not Established	----	Not available	Not available

SECTION III: PHYSICAL DATA

BOILING POINT 100°C (212°F)	SPECIFIC GRAVITY (H₂O = 1) 1.149	PERCENT SOLID BY WEIGHT 16 – 18
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 13.3 -13.7	APPEARANCE AND ODOUR Purple liquid, no odor	PHYSICAL STATE GAS__ LIQUID <u>X</u> SOLID__
COEFFICIENT OF WATER/OIL DISTRIBUTION Not available		

SECTION IV: FIRE & EXPLOSION DATA

FLASH POINT > 99°C (210°F)	METHOD USED ASTM - D56	FLAMMABLE LIMITS Not available
EXTINGUISHING MEDIA Not applicable	CONDITIONS OF FLAMMABILITY Not applicable	AUTO-IGNITION TEMPERATURE Not applicable
HAZARDOUS COMBUSTION PRODUCTS Not established		EXPLOSION DATA Not applicable
SPECIAL FIRE FIGHTING PROCEDURES Not available		
UNUSUAL FIRE AND EXPLOSION HAZARDS Not available		

SECTION V: REACTIVITY DATA

STABILITY: STABLE X **CONDITIONS OF INSTABILITY** **CONDITIONS OF REACTIVITY**
Not established Not established

INCOMPATIBILITY (MATERIALS TO AVOID) Strong acids and strong oxidizing agents

HAZARDOUS DECOMPOSITION PRODUCTS None known

SECTION VI: TOXICOLOGICAL PROPERTIES

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

EXPOSURE LIMIT Not established for mixture.

EFFECTS OF ACUTE EXPOSURE:

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

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

INHALATION Breathing product vapor or mist may cause irritation or damage of the respiratory tract with symptoms of nasal discomfort and discharge with chest pain and coughing.

SKIN CONTACT Causes severe skin damage or irritation with symptoms of pain, redness and chemical burns. Harmful contact may not cause immediate pain. Repeated contact may cause dermatitis.

EFFECTS OF CHRONIC EXPOSURE

None known

IRRITANCY OF PRODUCT

CORROSIVE

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 alkali resistant gloves and splash goggles. If indicated by conditions of use, impervious apron, face shield and other protective equipment should be considered in order to minimize contact with this product. Eyewash stations and washing facilities should be readily accessible. 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.

LEAK AND SPILL PROCEDURE: Contain large spills and transfer to appropriate container for reclamation or disposal. Absorb remaining material or small spills with an inert material and dispose in accordance with regulations.

WASTE DISPOSAL METHOD: Assure conformance with regulations.

HANDLING PROCEDURES: Do not get in eyes, on skin or clothing. Avoid breathing product vapor or mist. Do not swallow. Use with adequate ventilation. Wash thoroughly after handling.

STORAGE REQUIREMENTS: Keep container closed when not in use. Do not freeze. Do not store above 49°C (120°F). Keep out of reach of children.

SPECIAL SHIPPING INFORMATION: UN 1760, Corrosive liquids, n.o.s., (contains potassium hydroxide), 8, II

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. Flush skin with water for at least 15 minutes. Get medical attention. Wash contaminated clothing before reuse. Destroy contaminated shoes.

INGESTION: Call a poison control center or doctor immediately for treatment advice. Do not induce vomiting. Drink one or two glasses of water to dilute product. Do not give anything by mouth to an unconscious person.

INHALATION: In case of respiratory irritation or dizziness, move person to fresh air. Get medical attention if irritation persists.

SECTION IX: PREPARATION INFORMATION

LIQUID STEAM CLEANER

DATE OF PREPARATION: October 20, 2015

SUPERCEDES: November 24, 2012

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

TELEPHONE NUMBER 800/537-8990