

MATERIAL SAFETY DATA SHEET

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Troy Chemical Industries, Inc. urges each customer or recipient of this MSDS to study it carefully to become aware of and understand the hazards associated with the product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology and fire prevention, as necessary or appropriate to use and understand the data contained in this MSDS.

To promote safe handling, each customer or recipient should: 1) Notify its employees, agents, contractors and other whom it knows or believes will use this material of the information in this MSDS and any other information regarding hazards or safety; 2) Furnish this same information to each of its customers for the product; and 3) Request its customers to notify their employees, customers and other users of the product, of this information.

SECTION 1 GENERAL INFORMATION & PRODUCT IDENTIFICATION**Product Name: TROY 1139 FP****EMERGENCY CONTACT: CHEMTREC 800-424-9300**

This number is to be used ONLY in case of emergencies involving a spill, leak, fire exposure or accident involving chemicals.

MSDS Prepared By: *Russell Wightman*

Version Number: 1
 Supersedes: 01/27/1997
 Form Revision Date: 11/25/2003
 Data Revision Date: 12/24/2003
 Formula: Mixture
 Chemical Family: Cleaning Compound, Liquid
 Packing Group: III
 Proper DOT Shipping Name: Corrosive Liquid containing Potassium Hydroxide, Sodium Hypochlorite
 DOT Hazard Classification: CORROSIVE
 DOT Hazard Label: CORROSIVE
 Identification Number: UN1759

HMS Hazard Rating

Health:	2	(Moderate)
Flammability:	0	(Minimal)
Reactivity:	0	(Minimal)
Special:		Alkali

SECTION 2 HAZARDOUS INGREDIENTS (29CFR 1910.1200)

Chemical Name	CAS Number	%	OSHA (PEL) TWA	ACGIH (TLV) TWA	OSHA (STEL) TWA
Potassium Hydroxide	001310-58-3	15	2 mg/m3	N/E	N/E
Pentasodium Triphosphate	007758-29-4	5	N/E	N/E	N/E
Sodium Hypochlorite	007681-52-9	3	N/E	N/E	N/E

N/E = None Established N/A = Not Applicable

NOTE: If this product contains chemical subject to the reporting requirements of Section 313 of EPCRA of 1988, they will be listed in Section 11.

SECTION 3 PHYSICAL PROPERTIES

Appearance: Clear, pale yellow liquid with chlorine odor
 Boiling Range (760 mm Hg): Not Determined
 Melting Range (760 mm Hg): Not Determined
 Vapor Pressure (mm Hg): Not Determined
 Vapor Density (Air = 1): > 1
 Specific Gravity (Water = 1): 1.150 - 1.190 (1.175 Nominal)
 % Volatile (By Weight, Excluding Water): < 3
 Evaporation Rate (BuAc = 1): < 1
 Solubility (In Water): Complete
 pH (Concentrate): 12.00 - 14.00
 pH (1% Aqueous Solution): 11.00 - 13.00

SECTION 4 FIRE & EXPLOSION HAZARD DATA

Flash Point (P-M Closed Cup):	> 200 °F
Upper Flammable Limit (% In Air):	Not Applicable
Lower Flammable Limit (% In Air):	Not Applicable
Extinguishing Media:	Water spray, dry chemical, foam and/or carbon dioxide. Use water spray to cool nearby containers and structures exposed to fire.
Special Fire-Fighting Procedures:	Evacuate non-emergency personnel to a safe area. Contact emergency personnel as necessary. Avoid breathing smoke, fumes and decomposition products. As in any fire, wear self-contained breathing apparatus pressure-demand MSHA/NIOSH (approved or equivalent) and full protective gear.
Unusual Fire & Explosion Hazards:	None known.

SECTION 5 REACTIVITY DATA

Stability:	Stable under normal use and storage conditions.
Conditions to Avoid:	Excessive heat, open flames, sparks or any other ignition source.
Materials to Avoid:	Acids and non-ferrous metals such as aluminum, magnesium and zinc.
Hazardous Decomposition Products:	Burning can produce the following decomposition products: Oxides of carbon, silicon and nitrogen. Carbon monoxide is highly toxic if inhaled; carbon dioxide in sufficient concentrations can act as an asphyxiant. Acute overexposure to the products of combustion may result in irritation of the respiratory tract.
Hazardous Polymerization:	Will Not Occur

SECTION 6 HEALTH HAZARD DATA

Threshold Limit Value (TLV):	None Established. See SECTION 2 for TLV's of Hazardous Ingredients in this product.
Permissible Exposure Level (PEL):	None Established. See SECTION 2 for PEL's of Hazardous Ingredients in this product.
Primary Route(s) of Exposure:	Skin and eye contact. Inhalation of vapors and mists.
Eye Contact:	Causes severe burns and irritation, experienced as discomfort or pain, excessive blinking and tear production, marked excessive redness and swelling of the conjunctiva and chemical burns of the cornea. Corneal injury may be severe, extensive and, if not treated promptly, could result in permanent impairment of vision.
Skin Contact:	Brief contact may cause irritation with itching and burning, local redness and possibly swelling. Prolonged contact causes chemical burns with local discomfort or pain, severe excess redness and swelling, tissue destruction, fissures, ulceration and possibly bleeding into the inflamed area. Effects may cause scar formation.
Ingestion:	Causes irritation or chemical burns of the mouth, throat, chest and abdomen, with difficulty in swallowing, nausea, vomiting, diarrhea, weakness, thirst, dizziness, faintness, drowsiness, headache, decreased awareness and responsiveness, staggered gait, euphoria, lack of coordination, loss of consciousness and death.
Inhalation:	Inhalation of dusts or mists can cause damage to the upper respiratory tract and to the lung tissue, depending on severity of exposure. Effects can range from mild irritation of mucous membranes to severe pneumonitis and destruction of lung tissue.
Chronic Effects of Exposure:	Repeated contact with the skin may cause a severe cumulative dermatitis. Long term repeated exposure to aerosols from undiluted or aqueous material may result in irritation and injury of the respiratory tract.
Medical Conditions Generally Aggravated by Exposure:	Skin contact may aggravate an existing dermatitis. Repeated exposure to mists and dusts may exacerbate existing chronic or fibrotic lung disease.

SECTION 7 EMERGENCY & FIRST AID PROCEDURES

EYE CONTACT:	Immediately flush eyes with plenty of water for at least 15 minutes. Hold eyelids open during this flushing with water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. GET IMMEDIATE MEDICAL ATTENTION
SKIN CONTACT:	Immediately wash thoroughly with soap and water, then flush with plenty of water. Remove contaminated clothing and do not reuse before washing. GET IMMEDIATE MEDICAL ATTENTION
INGESTION:	DO NOT INDUCE VOMITING. Never give anything by mouth to an unconscious person. Give large quantities of water. If available, give several glasses of water, followed by citrus fruit juice or dilute vinegar. If vomiting occurs spontaneously, keep airway clear. GET IMMEDIATE MEDICAL ATTENTION
INHALATION:	Remove to fresh air. If not breathing, administer artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. GET IMMEDIATE MEDICAL ATTENTION
NOTE TO PHYSICIAN:	No specific antidote is known. Therapy is directed at preventing absorption, administering to the symptoms as they occur and providing supportive therapy.

SECTION 8 TOXICITY DATA - INGREDIENTS LISTED AS CARCINOGENS

Chemical Name	CAS Number	NTP	IARC	ACGIH	SUBPART Z	OSHA
Potassium Hydroxide	001310-58-3	No	No	No	No	No
Pentasodium Triphosphate	007758-29-4	No	No	No	No	No
Sodium Hypochlorite	007681-52-9	No	No	No	No	No

SECTION 9 PERSONAL PROTECTION EQUIPMENT INFORMATION

- RESPIRATORY PROTECTION:** Use NIOSH/MSHA approved dust/mist filter respirator for routine work purposes when exposure to dusts or mists exceed the permissible exposure level (PEL). The respirator use limitations made by NIOSH/MSHA 20 CFR 1910.134.
- VENTILATION:** Use ventilation adequate to keep exposures to hazardous ingredients below their Threshold Limit Values (TLV) or Permissible Exposure Levels (PEL). See Section 2. Local exhaust should be sufficient to maintain dust and mist levels below the PEL.
- EYE PROTECTION:** Chemical splash goggles if eye contact is likely.
- PROTECTIVE GLOVES:** Impervious gloves (rubber, nitrile or neoprene).
- OTHER PROTECTIVE EQUIPMENT:** Appropriate protective clothing if working with concentrated products. Products at use dilution MAY present less risk but protective clothing should still be worn.

SECTION 10 DISPOSAL INFORMATION

- MATERIAL SPILL OR RELEASE:** Only trained personnel equipped with NIOSH/MSHA approved, full face-piece combination dust/mist and acid gas respirators should be permitted in area. For dry material, use appropriate methods, shovels, brooms and vacuums to clean up the spill. If mixed with water, or likely to become mixed with water or any liquid, dike area to contain spill.
- Reclaim if possible. Or dilute with large amounts of water, then neutralize with dilute acid. Use vacuum truck to pick up neutralized material for proper disposal. Properly neutralized liquid residues (pH 6 to 9) may be disposed of in waste water treatment facilities which allow the discharge of neutral salt solutions. After all visible traces have been removed, flush area with large amounts of water.
- WASTE DISPOSAL METHOD:** Recommend disposal of residues in an approved hazardous waste management facility. Care must be taken when disposing of chemical materials and/or their containers to prevent environmental contamination. It is your duty to dispose of the chemical materials and/or containers in accordance with the Clean Air Act, Clean Water Act, the Resource Conservation and Recovery Act, and FIFRA, as well as any other relevant federal, state or local laws and regulations regarding disposal.

SECTION 11 FEDERAL REGULATORY INFORMATION

Chemical Name	CAS Number	%	Clean Air Act	313 Toxic Chemicals	CERCLA Reportable Quantity (Pounds)	Reportable Product quantity (Pounds)
Potassium Hydroxide	001310-58-3	15.0	No	No	1000	6667
Pentasodium Triphosphate	007758-29-4	5.0	No	No	5000	100000
Sodium Hypochlorite	007681-52-9	3.0	No	No	100	3333

SECTION 12 STATE REGULATORY INFORMATION

Chemical Name	CAS Number	%	State Lists	Miscellaneous	Proposition 65
Potassium Hydroxide	001310-58-3	15.0	MA1, NJ1S, PA1E	None	No
Pentasodium Triphosphate	007758-29-4	5.0	MA1, NJ1, PA1E	None	No
Sodium Hypochlorite	007681-52-9	3.0	MA1, NJ1, PA1E	None	No

SECTION 13 HANDLING PRECAUTIONS

- PRECAUTIONS TO BE TAKEN** Avoid skin and eye contact.
- DURING HANDLING AND STORAGE:** Avoid excessive inhalation of vapors and mists.
- Wash thoroughly after handling. Clean contaminated clothing before reuse.
- Store in cool, well ventilated place away from incompatible chemicals and materials.
- OTHER PRECAUTIONS:** An eye/face fountain and deluge shower should be available in the work area.
- Empty containers may retain vapors or product residue.
- Always obey hazard warnings and handle empty containers as if they were full.

Do not get in eyes, on skin or on clothing.

Do not swallow.

Do not breath vapors or mists.

Do not eat, drink or smoke in work area containing chemicals.

SECTION 14 USERS RESPONSIBILITY

The information contained herein is derived from upstream Material Safety Data Sheets and other references, considered, to the best of our knowledge and belief, to be accurate and reliable, but not guaranteed to be so. Since conditions of handling and use are beyond our control, no warranties, express or implied, are made.

The responsibility to provide a safe workplace remains with the user. The user should review the health hazards and safety information presented in this Material Safety Data Sheet and implement those safety procedures that are needed to insure a safe work environment in your facility.

It is also the responsibility of the user to comply with all applicable Federal, State and Local laws and regulations.