

MATERIAL SAFETY DATA SHEET

MANUFACTURER: TAYLOR TECHNOLOGIES, INC
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1. PRODUCT IDENTIFICATION

CATALOG NO.: R-0851
 PRODUCT NAME: Iron Reagent #1
 CHEMICAL FAMILY: Inorganic acid/organic dye solution

2. INGREDIENTS

INGREDIENT	CAS NO.	%	NATURE OF HAZARD
*Hydrochloric acid	7647-01-0	<10	Corrosive acid
Hydroxylamine hydrochloride	5470-11-1	<10	Irritant acid
Nonhazardous ingredients	NA	<1	None
Deionized water	7732-18-5	to 100	None

*This chemical is subject to the reporting requirements of SARA Title III Section 313 and 40 CFR 372.

3. PHYSICAL/CHEMICAL CHARACTERISTICS

STATE: Liquid APPEARANCE: Clear, colorless to yellow or orange
 ODOR: None BOILING PT (F): 215 pH: .1
 SPECIFIC GRAVITY: 1.1 VAPOR PRESSURE (mm Hg): 17
 VAPOR DENSITY (AIR=1): 1.3 PERCENT VOLATILE BY VOLUME: 90
 SOLUBILITY IN WATER: Soluble

4. FIRE, EXPLOSION HAZARD AND REACTIVITY DATA

FLASH PT: NA METHOD: NA
 FLAMMABLE LIMITS: LEL: NA UEL: NA
 EXTINGUISHING MEDIA: Dry chemical, carbon dioxide, water spray or foam
 SPECIAL PROCEDURES: Wear self-contained (positive pressure if available) breathing apparatus and special protective clothing
 FIRE/EXPLOSION HAZARDS AND HAZARDOUS DECOMPOSITION PRODUCTS: Contact with metals may produce hydrogen gas. May emit toxic fumes of chlorine, hydrogen chloride, nitrogen oxides.
 NFPA CODE: Health: 3 Flammability: 0 Reactivity: 2 Special: NA
 CONDITIONS TO AVOID: Extreme heat, temperatures. Contact with metals, alkalis, strong oxidizers.

5. HEALTH HAZARD DATA

INGREDIENT: Hydrochloric acid	
TOXICITY: LD50(oral-rat): 900 mg/kg	LC50(ihl-rat): 3124 ppm/1H
PEL: 7 mg/m3 (ceiling)	TLV: 7 mg/m3 (ceiling)
STEL: NE	

INGREDIENT: Hydroxylamine hydrochloride	
TOXICITY: LD50(oral-rat): 408 mg/kg	
PEL: NE	TLV: NE
STEL: NE	

5. HEALTH HAZARD DATA - continued

ROUTE(S) OF ENTRY: Inhalation X Ingestion X Skin X

TARGET ORGAN(S): Eyes, skin, respiratory tract

CARCINOGENICITY: NTP No IARC No OSHA No

HEALTH HAZARDS AND SYMPTOMS OF EXPOSURE:

EYES: Corrosive. Contact may cause severe burns.

SKIN: Corrosive. Contact may cause severe burns.

INGESTION: Corrosive. May cause severe gastrointestinal irritation, burns of mouth, esophagus and stomach.

INHALATION: Irritant

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Eye, skin, and respiratory conditions

6. PRECAUTIONARY MEASURES

PROTECTIVE EQUIPMENT: Rubber gloves, safety glasses, lab coat, rubber apron, adequate ventilation

HANDLING: Avoid contact with eyes, skin, and clothing. Avoid breathing chemical. Wash thoroughly after handling.

STORAGE: Cool, dry, well-ventilated area. Avoid direct sunlight.

7. EMERGENCY AND FIRST AID PROCEDURES

EYE AND SKIN CONTACT: Immediately flush eyes with water for 20 minutes or until chemical is removed. Call physician. Wash skin thoroughly with baking soda, soap and water.

INGESTION: Give large amounts of water or large amounts of water with milk of magnesia. Call physician. DO NOT INDUCE VOMITING. DO NOT give anything by mouth to a person who is unconscious, rapidly losing consciousness, or convulsing.

INHALATION: Remove to fresh air. Call physician.

8. SPILL AND DISPOSAL PROCEDURES

SPILL OR RELEASE: Neutralize with soda ash. Absorb with vermiculite or other inert material. Containerize for later disposal.

DISPOSAL: Incineration or other method to comply with all local, state, and federal regulations.

NA = Not applicable

ND = Not determined

NE = Not established

This Material Safety Data Sheet has been prepared in accordance with 29 CFR Part 1910.1200 and contains information believed to be accurate and complete at the date of preparation. However, no warranty is expressed or implied. Advice given under "Spill and Disposal Procedures" assumes compliance with federal, state, and local regulations regarding the disposal of hazardous waste.

DATE PREPARED: May 2009