

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Ferric Chloride (10%) Aqueous

SYNONYMS: None

PRODUCT CODES: ES37342, Component of Stain Kits: ES4807 Component of Elastic Stain Kit (Modified Verhoff's), ES4828 Movat Pentachrome Stain Kit

MANUFACTURER: Azer Scientific, Inc.

ADDRESS: 701 Hemlock Rd, Morgantown, PA 19543

CHEMTREC PHONE: 800-424-9300

SUPPORT: 610-524-5810

FAX: 610-901-3046

PRODUCT USE: Laboratory Reagent

PREPARED BY: CB

SECTION 1 NOTES:

SECTION 2: HAZARDS IDENTIFICATION

GHS CLASSIFICATION: Skin Corrosion/Irritation Category 2; Serious eye damage/irritation Category 1



Signal Word: Danger!

Hazard Phrases	
H315	Causes skin irritation.
H318	Causes serious eye damage.

Precautionary Phrases	
P280	Wear protective gloves/ eye protection/ face protection.
P264	Wash hands thoroughly after handling.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/physician.

SECTION 2 NOTES:

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Description: Mixture

***May contain additional non-hazardous proprietary ingredients.**

****May contain additional active ingredients at concentrations <1% w/v**

<u>INGREDIENT:</u>	<u>CAS NO.</u>	<u>% WT</u>
Ferric Chloride	10025-77-1	≤10

SECTION 3 NOTES:

SECTION 4: FIRST AID MEASURES

EYES: Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

SKIN: In case of contact, flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical if irritation develops.

INGESTION: Call medical doctor or poison control center immediately. Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms worsen.

SECTION 4 NOTES:

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABILITY OF THE PRODUCT:

FLASH POINT: Not Available

AUTOIGNITION TEMPERATURE: Not Available

NFPA HAZARD CLASSIFICATION

HEALTH:2 FLAMMABILITY: 0 REACTIVITY: 0

OTHER:

HMIS HAZARD CLASSIFICATION

HEALTH:2 FLAMMABILITY: 0 REACTIVITY: 0

PROTECTION: C

EXTINGUISHING MEDIA: Use extinguishing media suitable for surrounding fire.

NOT SUITABLE: Do not use water jet.

SPECIAL FIRE FIGHTING PROCEDURES: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

HAZARDOUS DECOMPOSITION PRODUCTS: Not available for mixture

SECTION 5 NOTES:

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES:

Small spill and leak: Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container.

Large spill and leak: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13).

SECTION 6 NOTES:
SECTION 7: HANDLING AND STORAGE

HANDLING: Avoid contact with eyes. Wash thoroughly after handling. Avoid breathing vapor.

STORAGE: Store in accordance with local regulations. Store in a segregated and approved area. Store in a well-ventilated area. Store at 15-30°C

SECTION 7 NOTES:
SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

ENGINEERING CONTROLS: General mechanical ventilation or laboratory fume hood. Ensure that eyewash stations and quick drench showers are close to the workstation.

RESPIRATORY PROTECTION: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

EYE PROTECTION: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. Recommended: splash goggles

SKIN PROTECTION: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: lab coat

HANDS: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Recommended: Neoprene

ENVIRONMENTAL EXPOSURE CONTROLS: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

WORK HYGIENIC PRACTICES: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.

EXPOSURE GUIDELINES:

Component	Source	Type	Value
Ferric chloride	OSHA PEL	TWA	1 mg/m ³
	OSHA PEL	STEL	2 mg/m ³

SECTION 8 NOTES:
SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Orange

ODOR: Odorless

PHYSICAL STATE: liquid

pH AS SUPPLIED: Acidic

BOILING POINT: Not available

MELTING POINT: Not available

FREEZING POINT: Not available

VAPOR PRESSURE (mmHg): Not available

VAPOR DENSITY (AIR = 1): Not available

EVAPORATION RATE: Not available

SOLUBILITY IN WATER: Soluble in water

MOLECULAR WEIGHT: Mixture

VISCOSITY: Not established

SECTION 9 NOTES:

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Product is stable under normal conditions of use.

CONDITIONS TO AVOID (STABILITY): Excessive heat, direct sunlight

INCOMPATIBILITY (MATERIAL TO AVOID): Metals, allyl chloride, sodium, potassium

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Hydrogen chloride fumes

HAZARDOUS POLYMERIZATION: No hazardous polymerization

CONDITIONS TO AVOID (POLYMERIZATION): N/A

SECTION 10 NOTES:

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

Numerical Measures: No data available

Carcinogenicity: No components are classified as human carcinogen.

Specific target organ toxicity - single exposure (Globally Harmonized System): no data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System): no data available

Aspiration hazard: no data available

Potential health effects:

Inhalation May cause respiratory tract irritation.

Ingestion May be harmful if swallowed.

Skin Causes skin irritation.

Eyes Causes eye irritation.

Signs and Symptoms of Exposure:

Burning of eyes, skin irritation

ROUTES OF ENTRY: Skin/eye contact and ingestion.

TARGET ORGANS: Not available

SECTION 11 NOTES:

SECTION 12: ECOLOGICAL INFORMATION

TOXICITY:

Fish: No relevant studies identified.

Crustacea: No relevant studies identified.

Algae/Aquatic Plants: No relevant studies identified.

Other Organisms: No relevant studies identified.

PERSISTENCE AND DEGRADABILITY: Biodegradation is expected

BIOACCUMULATIVE POTENTIAL: Bioaccumulation is unlikely.

MOBILITY IN SOIL: No data available

PBT and vPvB ASSESSMENT: Not required.

SECTION 12 NOTES:

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Unused product: dispose as a regulated hazardous waste. Spent product or spill clean up-follow all provincial, local, state, and federal regulations.

SECTION 13 NOTES:

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION: NOT REGULATED

TDG: NOT REGULATED

IATA: NOT REGULATED

IMDG/IMP: NOT REGULATED

SECTION 15: REGULATORY INFORMATION

United States

HCS Classification: Corrosive liquid

U.S. Federal regulations:

TSCA 8(a) IUR: Partial exemption

United States inventory (TSCA 8b): Listed on inventory.

SARA 302/304/311/312 extremely hazardous substances: No products were found.

SARA 302/304 emergency planning and notification: No products were found.

SARA 302/304/311/312 hazardous chemicals: No products were found.

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: No products were found.

SARA 313 Form R - Reporting:

DEA List I & II Chemicals

(Precursor Chemicals):

Not Listed

RTK STATES: None

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm: None

CANADA

WHMIS (Canada):

Class E: Corrosive liquid.

Canadian lists:

CEPA Toxic substances: The following components are listed: None.

Canadian ARET: None of the components are listed.

Canadian NPRI: The following components are listed: None

CEPA DSL / CEPA NDSL:

All components are listed or exempted.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

International regulations

International lists:

Australia inventory (AICS): All components are listed or exempted.

China inventory (IECSC): All components are listed or exempted.

Japan inventory: All components are listed or exempted.

Korea inventory: All components are listed or exempted.

New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.

Philippines inventory (PICCS): All components are listed or exempted.

SECTION 16: OTHER INFORMATION

National Fire Protection Association (U.S.A.)



DISCLAIMER: This Safety Data Sheet has been prepared in accordance with the Globally Harmonized System for the Classification and Labelling of Chemicals (GHS). To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries makes any warranty of merchantability or any other warranty, expressed or implied, which respect to such information, and we assume no liability resulting from its use. In no event shall Azer Scientific be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages resulting from use of or reliance upon this information.

PREPARATION INFORMATION: Prepared 09/15/2015 REV1

Reviewed 07/28/2017