



# HI-VALLEY CHEMICAL

## LABORATORY PRODUCTS

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**SDS**  
Hi Valley Chemical

## Ferric Chloride Hexahydrate

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### PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier:** Ferric Chloride Hexahydrate  
**Synonyms:** Iron (III) Chloride Hexahydrate  
**SDS Number:** R-150  
**Revision Date:** 7/19/2019  
**Version:** 1

**Supplier Details:** High Valley Products, Inc.  
1134 West 850 North  
Centerville, Utah 84014

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### HAZARDS IDENTIFICATION

#### Classification of Substance

##### GHS Classification in Accordance with 29 CFR 1910 (OSHA HCS):

Physical, Corrosive to Metals, 1  
Health, Acute toxicity, 4 Oral  
Health, Skin corrosion/irritation, 2  
Health, Serious Eye Damage/Eye Irritation, 1

#### GHS Label Elements, Including Precautionary Statements

**GHS Signal Word:** **DANGER**

**GHS Hazard Pictograms:**



##### GHS Hazard Statements:

H290 - May be corrosive to metals  
H302 - Harmful if swallowed  
H315 - Causes skin irritation  
H318 - Causes serious eye damage

##### GHS Precautionary Statements:

P234 - Keep only in original packaging.  
P264 - Wash ... thoroughly after handling.  
P270 - Do not eat, drink or smoke when using this product.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P301 + P312 - IF SWALLOWED: Call a POISON CENTER/ doctor/...if you feel unwell.  
P302 + P352 - IF ON SKIN: Wash with plenty of 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/doctor/...  
P330 - Rinse mouth.  
P332 + P313 - If skin irritation occurs: Get medical advice/attention.  
P362 - Take off contaminated clothing.  
P390 - Absorb spillage to prevent material damage.  
P406 - Store in a corrosion resistant/...container with a resistant inner liner.

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## COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Ingredients		
CAS#	%	Chemical Name
10025-77-1	100%	Ferric Chloride Hexahydrate

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## FIRST AID MEASURES

- Inhalation:** If inhaled, remove to fresh air and call a physician for instructions. In case of difficulty breathing, use oxygen assistance. Get medical attention if condition is critical.
- Skin Contact:** Wash with soap and water. Consult a physician.
- Eye Contact:** Immediately flush eyes with large amounts of water for at least 15 minutes, lifting eyelids occasionally to facilitate irrigation.
- Ingestion:** Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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## FIRE FIGHTING MEASURES

Extinguishing media  
 Suitable extinguishing media  
 Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture  
 Hydrogen chloride gas, Iron oxides

Advice for firefighters  
 Wear self-contained breathing apparatus for firefighting if necessary.

Further information  
 No data

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## ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures:**  
 Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

**Environmental precautions:**  
 Do not let product enter drains.

**Methods and materials for containment and cleaning up:**  
 Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

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## HANDLING AND STORAGE

**Handling Precautions:** Avoid contact with eyes, skin, or clothing. Avoid formation of dust and aerosols. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Provide appropriate exhaust ventilation at places where dust is formed. Provide appropriate exhaust ventilation at places where dust is formed.

**Storage Requirements:** Store in cool/dry/well ventilated area.

**Personal Protective Equipment:**

Ferric Chloride Hexahydrate cas#:(10025-77-1) [100%]

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after

use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method:

EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the

supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industria situation of anticipated use by our customers. It should not be construed as offering an approval for

any specific use scenario.

Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to

the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use (EN 143) respirator cartridges as a

backup to engineering controls. If th full-face supplied air respirator. Use respirators and components tested

and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

Ferric Chloride Hexahydrate cas#:(10025-77-1) [100%]

Component	CAS-No.	Value	Control parameters	Basis
Iron trichloride hexahydrate	10025-77-1	TWA	1.000000 mg/m3	USA. ACGIH Threshold Limit Values (TLV)
	Remarks	Upper Respiratory Tract irritation varies	Skin irritation varies	
		TWA	1.000000 mg/m3	USA. NIOSH Recommended Exposure Limits
		TWA	1 mg/m3	USA. ACGIH Threshold Limit Values (TLV)
		Upper Respiratory Tract irritation varies	Skin irritation varies	
		TWA	1 mg/m3	USA. NIOSH Recommended Exposure Limits

**Appearance:** Yellow

**Physical State:** Solid

**Freezing or Melting Point:** No data available

**Odor Threshold:** No data available

**Flash Point:** No data available

**Specific Gravity or Density:** 1.82  
**Boiling Point:** 280 - 285 °C (536 - 545 °F) - lit.  
**Flammability:** No data available  
**Vapor Pressure:** 1 hPa at 194 °C (381 °F)  
**Potentia Hydrogenii:** No data available

**Volatile organic compound:** No data available  
**Upper Flammability Limit and Lower Flammability Limit:** No data available

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## STABILITY AND REACTIVITY

**Reactivity:** No data available  
**Chemical Stability:** Stable under recommended storage conditions.  
**Conditions to Avoid:** Avoid moisture  
**Materials to Avoid:** Strong Oxidizing Agents. Forms shock-sensitive mixtures with certain other materials., Sodium/sodium oxides, Potassium Forms shock-sensitive mixtures with certain other materials., Sodium/sodium oxides, Potassium

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## TOXICOLOGICAL INFORMATION

Ferric Chloride Hexahydrate cas#:(10025-77-1) [100%]

### Acute toxicity

LD50 Oral - Rat - 900 mg/kg(Iron trichloride hexahydrate)  
Inhalation: No data available(Iron trichloride hexahydrate)  
Dermal: No data available(Iron trichloride hexahydrate)  
No data available(Iron trichloride hexahydrate)

### Skin corrosion/irritation

No data available(Iron trichloride hexahydrate)

### Serious eye damage/eye irritation

No data available(Iron trichloride hexahydrate)

### Respiratory or skin sensitisation

No data available(Iron trichloride hexahydrate)

### Germ cell mutagenicity

No data available(Iron trichloride hexahydrate)

### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.  
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.  
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

### Reproductive toxicity

No data available(Iron trichloride hexahydrate)  
No data available(Iron trichloride hexahydrate)

### Specific target organ toxicity - single exposure

No data available(Iron trichloride hexahydrate)

### Specific target organ toxicity - repeated exposure

No data available

### Aspiration hazard

No data available(Iron trichloride hexahydrate)

### Additional Information

RTECS: NO5425000

Overdose of iron compounds may have a corrosive effect on the gastrointestinal tract. Several hours may elapse before symptoms that can in hematemesis occur. After apparent recovery a person may experience metabo

Further complications may develop leading to acute liver necrosis that ca, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.(Iron trichloride hexahydrate)

## 12 ECOLOGICAL INFORMATION

Ferric Chloride Hexahydrate cas#:(10025-77-1) [100%]

Toxicity  
No data available

Persistence and degradability  
No data available

Bioaccumulative potential  
No data available

Mobility in soil  
No data available(Iron trichloride hexahydrate)

Results of PBT and vPvB assessment  
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects  
No data available

## 13 DISPOSAL CONSIDERATIONS

Dispose of in accordance with local regulations.

## 14 TRANSPORT INFORMATION

UN3260, Corrosive solid, acidic, inorganic, n.o.s., 8, PGIII, (Iron trichloride hexahydrate)

## 15 REGULATORY INFORMATION

Component (CAS#) [%] - CODES

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Ferric Chloride Hexahydrate (10025-77-1) [100%]

Regulatory CODE Descriptions  
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## 16 OTHER INFORMATION

Disclaimer:

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