



Material Safety Data Sheet

NFPA	HMIS	Personal Protective Equipment						
	<table border="1"> <tr><td>Health Hazard</td><td style="text-align: center;">3</td></tr> <tr><td>Fire Hazard</td><td style="text-align: center;">0</td></tr> <tr><td>Reactivity</td><td style="text-align: center;">1</td></tr> </table>	Health Hazard	3	Fire Hazard	0	Reactivity	1	
Health Hazard	3							
Fire Hazard	0							
Reactivity	1							
See Section 15.								

Section 1. Chemical Product and Company Identification		Page Number: 1			
Common Name/ Trade Name	Ferric chloride hexahydrate	Catalog Number(s). XX362, F1010, F1017			
		CAS# 10025 - 77 - 1 ; 7705 - 08 - 0 (anhydrous CAS no.)			
Supplier	WOODFINISHING ENTERPRISES 1729 NORTH 68 TH STREET WAUWATOSA WI 53213	RTECS NO5425000			
		TSCA TSCA 8(b) inventory: No products were found. Exempt from TSCA 8 (b) Inventory listing since it is a hydr ate. Howev er , the anhydrous form (CAS no. 7705-08-0) is listed on the TSCA 8(b) Inventory.			
Commercial Name(s)	Not available.	CI# Not available.			
Synonym	Iron (III) Chloride Hexahydrate; Ferric chloride, hexahydrate; Iron trichloride, hexahydrate; Iron chloride (FeCl ₃), hexahydrate	<u>IN CASE OF EMERGENCY</u> <u>CHEMTREC (24hr) 800-424-9300</u> CALL (414) 774-1724			
Chemical Name	Ferric Chloride Hexahydrate				
Chemical Family	Not available.				
Chemical Formula	FeCl ₃ .6H ₂ O				
Supplier	WOODFINISHING ENTERPRISES 1729 NORTH 68 TH STREET WAUWATOSA WI 53213				
Section 2. Composition and Information on Ingredients					
		<i>Exposure Limits</i>			
Name	CAS #	TWA (mg/m³)	STEL (mg/m³)	CEIL (mg/m³)	% by Weight
1) Ferric chloride hexahydrate	10025-77-1	1			100
Toxicological Data on Ingredients	Ferric chloride hexahydrate LD50: Not available. LC50: Not available.				

Section 3. Hazards Identification

Potential Acute Health Effects	Very hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion. Hazardous in case of skin contact (corrosive), of eye contact (corrosive), of inhalation. Slightly hazardous in case of skin contact (permeator). The amount of tissue damage depends on length of contact. Eye contact can result in corneal damage or blindness. Skin contact can produce inflammation and blistering. Inhalation of dust will produce irritation to gastro-intestinal or respiratory tract, characterized by burning, sneezing and coughing. Severe over-exposure can produce lung damage, choking, unconsciousness or death. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.
Potential Chronic Health Effects	CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance may be toxic to kidneys, liver, Urinary system. Repeated or prolonged exposure to the substance can produce target organs damage. Repeated exposure of the eyes to a low level of dust can produce eye irritation. Repeated skin exposure can produce local skin destruction, or dermatitis. Repeated inhalation of dust can produce varying degree of respiratory irritation or lung damage.

Section 4. First Aid Measures

Eye Contact	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.
Skin Contact	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
Serious Skin Contact	Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
Serious Inhalation	Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. WARNING: It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.
Ingestion	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.
Serious Ingestion	Not available.

Section 5. Fire and Explosion Data

Flammability of the Product	Non-flammable.
Auto-Ignition Temperature	Not applicable.
Flash Points	Not applicable.
Flammable Limits	Not applicable.
Products of Combustion	Not available.
Fire Hazards in Presence of Various Substances	Not applicable.
Explosion Hazards in Presence of Various Substances	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.
Fire Fighting Media and Instructions	Not applicable.
Special Remarks on Fire Hazards	Not available.

Continued on Next Page

Special Remarks on Explosion Not available.

Hazards

Section 6. Accidental Release Measures

Small Spill	Use appropriate tools to put the spilled solid in a convenient waste disposal container.
Large Spill	Corrosive solid. Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7. Handling and Storage

Precautions	Keep container dry. Do not ingest. Do not breathe dust. Never add water to this product. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes.
Storage	Keep container tightly closed. Keep container in a cool, well-ventilated area. Hygroscopic

Section 8. Exposure Controls/Personal Protection

Engineering Controls	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
Personal Protection	Splash goggles. Synthetic apron. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.
Personal Protection in Case of a Large Spill	Splash goggles. Full suit. Vapor and dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
Exposure Limits	TWA: 1 (mg(Fe)/m ³) from ACGIH (TLV) [United States] TWA: 1 (mg(Fe)/m ³) from NIOSH TWA: 1 (mg(Fe)/m ³) [Canada] TWA: 1 STEL: 2 (mg(Fe)/m ³) [United Kingdom (UK)] Consult local authorities for acceptable exposure limits.

Section 9. Physical and Chemical Properties

Physical state and appearance	Solid. (Solid powder or lumps)	Odor	Not available.
Molecular Weight	270.3 g/mole	Taste	Not available.
pH (1% soln/water)	Not available.	Color	Yellow. Brown.
Boiling Point	Not available.		
Melting Point	37°C (98.6°F)		
Critical Temperature	Not available.		
Specific Gravity	1.82 (Water = 1)		
Vapor Pressure	Not applicable.		
Vapor Density	Not available.		
Volatility	Not available.		
Odor Threshold	Not available.		
Water/Oil Dist. Coeff.	Not available.		
Ionicity (in Water)	Not available.		
Dispersion Properties	See solubility in water.		
Solubility	Easily soluble in cold water, hot water.		

Section 10. Stability and Reactivity Data

Stability	The product is stable.
Instability Temperature	Not available.
Conditions of Instability	Incompatible materials, heat
Incompatibility with various substances	Reactive with oxidizing agents. Slightly reactive to reactive with moisture.
Corrosivity	Non-corrosive in presence of glass.
Special Remarks on Reactivity	Hygroscopic; keep container tightly closed. Incompatible with alkali metals, allyl chloride, ethylene oxide, potassium, sodium
Special Remarks on Corrosivity	Not available.
Polymerization	Will not occur.

Section 11. Toxicological Information

Routes of Entry	Inhalation. Ingestion.
Toxicity to Animals	LD50: Not available. LC50: Not available.
Chronic Effects on Humans	May cause damage to the following organs: kidneys, liver, Urinary system.
Other Toxic Effects on Humans	Very hazardous in case of skin contact (irritant), of ingestion. Hazardous in case of skin contact (corrosive), of eye contact (corrosive), of inhalation (lung corrosive). Slightly hazardous in case of skin contact (permeator).
Special Remarks on Toxicity to Animals	LDL [Rat] - Route: Oral; Dose: 900 mg/kg
Special Remarks on Chronic Effects on Humans	May affect genetic material (mutagenic). May cause adverse reproductive effects based on animal test data
Special Remarks on other Toxic Effects on Humans	Acute Potential Health Effects: Skin: Causes irritation and burns of the skin. This compound has been infrequently associated with skin sensitization in humans. Eyes: Causes eye irritation and burns. Higher exposures may lead to corneal or conjunctival ulceration. Ingestion: Harmful if swallowed. Causes irritation of the gastrointestinal (digestive) tract with nausea, vomiting, diarrhea and hemorrhage and possible burns. May cause severe and permanent damage to the digestive tract. Delayed effects may include cardiovascular disturbances, liver damage, kidney damage, metabolic acidosis, cerebral coma and possible death. It may also affect behavior/central nervous system (convulsions, lethargy) Inhalation: Causes irritation of the respiratory tract with possible burns. Chronic Potential Health Effects: May affect genetic material Ingestion: May affect liver/spleen (increased iron levels and damage), urinary system (Kidneys, ureter, bladder), blood (changes in white blood cell count), central nervous system, and cardiovascular system. Eyes: May cause eye discoloration.

Section 12. Ecological Information

Ecotoxicity	Not available.
BOD5 and COD	Not available.
Products of Biodegradation	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation	The products of degradation are less toxic than the product itself.
Special Remarks on the Products of Biodegradation	Not available.

Section 13. Disposal Considerations

Waste Disposal Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14. Transport Information

DOT Classification Class 8: Corrosive material

Identification UNNA: 1773 : Ferric Chloride PG: III

Special Provisions for Transport Not available.

DOT (Pictograms)



Section 15. Other Regulatory Information and Pictograms

Federal and State Regulations For Ferric Chloride (CAS no. 7705-08-0) or Iron salts, soluble:
 New York release reporting list: Ferric chloride
 Connecticut Hazardous Materials Survey: Iron salts, soluble
 Pennsylvania RTK: Ferric chloride and iron salts
 Massachusetts RTK: Ferric chloride
 Massachusetts spill list: Ferric chloride
 New Jersey: Ferric chloride
 New Jersey spill list: Ferric chloride
 Louisiana spill reporting: Ferric chloride
 California Director's List of Hazardous Substances: Ferric chloride and Iron salts, soluble
 Minnesota: Iron salts, soluble
 Rhode Island: Iron salts, soluble
 CERCLA: Hazardous substances.: Ferric chloride: 1000 lbs. (453.6 kg)

California Proposition 65 Warnings California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: No products were found.
 California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found.

Other Regulations OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).
 EINECS: This product is not on the European Inventory of Existing Commercial Chemical Substances.
 Canada: Not listed on Canadian Domestic Substance List (DSL) or Canadian Non-Domestic Substance List (NDSL).
 China: Listed on National Inventory.
 Japan: Listed on National Inventory (ENCS).
 Korea: Not listed on National Inventory (KECI).
 Philippines: Listed on National Inventory (PICCS).
 Australia: Listed on AICS.

Other Classifications	WHMIS (Canada) CLASS E: Corrosive solid.	
	DSCL (EEC) R22- Harmful if swallowed. R34- Causes burns.	S25- Avoid contact with eyes. S36/37/39- Wear suitable protective clothing, gloves and eye/face protection. S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

HMIS (U.S.A.)	Health Hazard 3	National Fire Protection Association (U.S.A.)		Flammability		
	Fire Hazard 0				Health	Reactivity
	Reactivity 1					
	Personal Protection j					

**WHMIS (Canada)
(Pictograms)**



**DSCL (Europe)
(Pictograms)**



**TDG (Canada)
(Pictograms)**



**ADR (Europe)
(Pictograms)**



Protective Equipment



Gloves.



Synthetic apron.



Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.



Splash goggles.

Section 16. Other Information

MSDS Code F3100

References Not available.

Other Special Considerations Not available.

Validated by Dale Przybyl on 10/28/2010.

Verified by Dale Przybyl.
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CALL (414) 774-1724

Notice to Reader

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, WoodFinishing Enterprises. assumes no responsibility for the completeness or accuracy of the information contained herein.