SDS

SAFETY DATA SHEET

Oakwood Products, Inc
730 Columbia HWY N
Estill, SC 29918
www.oakwoodchemical.com

Phone Numbers:

Product Information	803-739-8800
Transportation Emergency	800-451-8346
Outside the USA	760-602-8700

MATERIAL IDENTIFICATION

NAME: Iron(III) chloride, anhydrous
CAS#: [7705-08-0]
CAT#: 099039
For R&D use only.

HAZARDS IDENTIFICATION

GHS Classification
Corrosive to Metals (Category 1)
Acute toxicity, oral (Category 4)
Skin corrosion/irritation (Category 2)
Serious eye damage/eye irritation (Category 1)
Hazardous to the aquatic environment, acute hazard (Category 2)

GHS Label elements, including precautionary statements

Pictograms

Signal Word Danger

Hazard Statement(s)

H290	May be corrosive to metals
H302	Harmful if swallowed
H315	Causes skin irritation
H318	Causes serious eye damage
H401	Toxic to aquatic life

Precautionary Statement(s)

P234	Keep only in original container.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302 + P352	IF ON SKIN: wash with plenty of soap and water.

P304 + P340	IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.
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.
P332 + P313	IF SKIN irritation occurs: Get medical advice/attention.

COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms	:	Molysite, Iron trichloride, Ferric chloride
Formula	:	FeCl3
Molecular Weight	:	162.21 g/mol

CAS	Description	Concentration
7705-08-0	Iron(III) chloride, anhydrous	98%

FIRST AID MEASURES

In case of eye contact
Immediately flush eyes with running water for at least 15 minutes while keeping eyes open. Seek medical attention.

In case of skin contact
Wash thoroughly with soap and plenty of water. Seek medical attention.

If inhaled
Remove victim from source of exposure to fresh air. If breathing is difficult, administer oxygen. Seek medical attention.

If swallowed
Do not induce vomiting. Give water to victim to drink. Seek medical attention.

FIRE-FIGHTING MEASURES

Suitable extinguishing media
Use carbon dioxide, dry chemical powder, alcohol-resistant or polymer foam.

Special protective equipment for fire-fighters
Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Unusual fire and explosion hazards/decomposition of product
emits toxic fumes under fire conditions.

ACCIDENTAL RELEASE MEASURES

Personal precautions
Use personal protective equipment. Avoid breathing fumes, vapors, mists or gas. Ventilate area. Remove all sources of ignition. Evacuate personnel.

Environmental precautions
Prevent further leakage if safe to do so.

Methods and materials for containment and clean up
Absorb spills on sand or vermiculite and place in closed container for disposal.

HANDLING AND STORAGE

Precautions for safe handling
Avoid prolonged use. Avoid all direct contact with material. Do not breathe dust or vapor. Wash thoroughly after handling.
Reacts violently with water.

Precautions for safe storage
Keep container tightly closed. Store in a cool, dry, well-ventilated area.

EXPOSURE CONTROL/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment

Eye/face protection
Wear protective safety goggles or face shields tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Hand/skin protection
Avoid all direct contact with product.
Wear chemical-resistant gloves.
Wear protective clothing and boots.
After contact with skin, wash immediately.

Respiratory protection
Ensure adequate ventilation during use. Approved respiratory equipment must be used when airborne concentrations are unknown or exceed the exposure limits.

PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Dark grey powder
Odour	no data available
Odour Threshold	no data available
Melting point/Freezing Point	304°C
Boiling Point	no data available
Flash Point	no data available
Evaporation Rate	no data available
Flammability (solid, gas)	no data available
Upper/Lower Flammability or Explosive limits	no data available
Vapour pressure	no data available
Relative Density	no data available
Solubility(ies)	no data available
Partition coefficient: n-octanol/water	no data available
Auto-ignition temperature	no data available
Decomposition temperature	no data available

Viscosity	no data available
Refractive Index	no data available

STABILITY AND REACTIVITY

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
Exothermic in contact with water
Forms shock-sensitive mixtures with certain other materials

Conditions to avoid
no data available

Incompatible materials
Strong oxidizing agents, strong bases, and potassium, alkali metals.

Hazardous decomposition products
May evolve carbon monoxide, carbon dioxide, hydrogen chloride, and hydrogen fluoride.

TOXICOLOGICAL INFORMATION

Acute toxicity

Oral LD50
Mouse - 1,300 mg/kg

Dermal LD50
Rabbit - > 2,000 mg/kg

Skin corrosion/irritation
Rabbit - Irritating

Serious eye damage/eye irritation
Rabbit - Severe irritating

Respiratory or skin sensitization
no data available

Germ cell mutagenicity
no data available

Carcinogenicity
no data available

Reproductive toxicity
no data available

STOT-single exposure
no data available

STOT-repeated exposure
no data available

Aspiration hazard
no data available

Exposure Routes
Causes burns.
May have harmful effects if inhaled or swallowed.

Signs and Symptoms of Exposure
Spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema. Overdose of iron compounds may have a corrosive effect on the gastrointestinal mucosa and be followed by necrosis, perforation, and stricture formation. Several hours may elapse before symptoms that can include epigastric pain, diarrhea, vomiting, nausea, and hematemesis occur. After apparent recovery a person may experience metabolic acidosis, convulsions, and coma hours or days later. Further complications may develop leading to acute liver necrosis that can result in death due to hepatic coma.

Additional Information
RTECS: LJ9100000

To the best of our knowledge, the health hazards of this material have not been fully investigated.

ECOLOGICAL INFORMATION

Toxicity
Toxicity to fish:
LC50 - Pimephales promelas (fathead minnow) - 21.84 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates:
EC50 - Daphnia magna (Water flea) - 9.6 mg/l - 48 h

Persistence and degradability
no data available

Bioaccumulative potential
no data available

Mobility in soil
no data available

PBT and vPvB assessment
no data available

Other adverse effects
no data available

DISPOSAL CONSIDERATIONS

Dissolve in or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all Federal, State and local laws.

TRANSPORT INFORMATION

DOT
Ferric chloride, anhydrous

8
UN1773 III
Reportable Quantity (RQ): 1000 lbs

IMDG
Ferric chloride, anhydrous
8
UN1773 III
EMS-No: F-A, S-B
Marine Pollutant: Yes

IATA
Ferric chloride, anhydrous
8
UN1773 III

REGULATORY INFORMATION

SARA 302 Components
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components
SARA 313: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 313.

New Jersey Right to Know Components
This product contains a chemical on the New Jersey Right to Know Components List.

	CAS
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California Prop. 65 Components
This product may contain a chemical known to the State of California to cause cancer, birth defects, or other reproductive harm.

OTHER INFORMATION

Version : 1.0

Revision Date : 2/5/2016

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. Oakwood shall not be held liable for any damage resulting from handling or from contact with the above product.