



NAPCO CHEMICAL COMPANY

Safety Data Sheet Ferric Chloride 38-42%

SECTION 1: Identification

1.1 Product identifier

Product name Ferric Chloride 38-42%

1.4 Supplier's details

Name NAPCO Chemical Company
Address 2830 Spring Cypress Rd
Spring, Tx 77383
United States

Telephone 281-651-6800
Fax 281-651-6868

1.5 Emergency phone number(s)

ChemTel 1(800)255-3924

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

GHS classification in accordance with OSHA (29 CFR 1910.1200)

- Skin corrosion/irritation (chapter 3.2), Cat. 1A
- Eye damage/irritation (chapter 3.3), Cat. 1
- Specific target organ toxicity, single exposure (chapter 3.8), Cat. 2
- Specific target organ toxicity, single exposure (chapter 3.8), Cat. 3

2.2 GHS label elements, including precautionary statements

Pictogram



Signal word

Danger

Hazard statement(s)

H314

Causes severe skin burns and eye damage

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H318 Causes serious eye damage
H335 May cause respiratory irritation
H371 May cause damage to organs

Precautionary statement(s)

P260 Do not breathe mist or vapor.
P261 Avoid breathing mist or vapor.
P264 Wash ... thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P284 [In case of inadequate ventilation] wear respiratory protection.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+P352 IF ON SKIN: Wash with plenty of water/...
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340 IF INHALED: Remove person to fresh air and keep 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.

P308+P311 IF exposed or concerned: Call a POISON CENTER/doctor/...
P310 Immediately call a POISON CENTER/doctor/...
P311 Call a POISON CENTER/doctor/...
P312 Call a POISON CENTER/doctor/... if you feel unwell.
P320 Specific treatment is urgent (see ... on this label).
P321 Specific treatment (see ... on this label).
P333+P313 If skin irritation or a rash occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P363 Wash contaminated clothing before reuse.
P403+P233 Store in a well ventilated place. Keep container tightly closed.
P405 Store locked up.
P501 Dispose of contents/container to ...

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

1. Iron(III) chloride solution, 38%

Concentration 40 %
EC no. 231-729-4
CAS no. 7705-08-0

2. HYDROCHLORIC ACID (<37%)

Concentration 1.5 %
EC no. 231-595-7
CAS no. 7647-01-0
Index no. 017-002-01-X

- Skin corrosion/irritation (chapter 3.2), Cat. 1B

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- Specific target organ toxicity, single exposure (chapter 3.8), Cat. 3

H314
H335

Causes severe skin burns and eye damage
May cause respiratory irritation

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

General advice	If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
If inhaled	Remove victim to fresh air and keep at rest position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
In case of skin contact	Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.
If swallowed	Do NOT induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into lungs. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician or poison control center immediately.
Personal protective equipment for first-aid responders	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves

4.2 Most important symptoms/effects, acute and delayed

Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

4.3 Indication of immediate medical attention and special treatment needed, if necessary

Provide general supportive measures and treat symptomatically. Chemical burns. Flush with water immediately. While flushing, remove clothing which does not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Water fog. Dry powder. Foam. Carbon dioxide (CO₂).

5.2 Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed.

5.3 Special protective actions for fire-fighters

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Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Further information

Move containers from fire area if you can do so without risk.

Use standard firefighting procedures and consider the hazards of other involved materials.

No unusual fire or explosion hazards noted.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Beware of vapors accumulating. Vapors can accumulate in low areas. For personal protection see section 8.

6.2 Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

6.3 Methods and materials for containment and cleaning up

Prevent entry into waterways, sewer, basements or confined areas. **SMALL SPILLS:** Contain and absorb with absorbent material and place into containers for later disposal. Wash site of spillage thoroughly with water. **LARGE SPILLS:** Dike far ahead of spill to prevent further movement. Recover by pumping or by using a suitable absorbent material and place into containers for later disposal. Dispose in suitable waste container

Reference to other sections

Never return spills to original containers for re-use. For waste disposal see section 13 of the SDS.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. When using, do not eat, drink or smoke. Provide adequate ventilation. Avoid prolonged exposure. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

7.2 Conditions for safe storage, including any incompatibilities

Store locked up. Store in original tightly closed container. Store away from incompatible materials including any incompatibilities. (See section 10 of the SDS).

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

1. Hydrogen chloride (CAS: 7647-01-0)

PEL (Inhalation): (C) 5 ppm (OSHA)

OSHA Annotated Table Z-1, www.osha.gov

2. Hydrogen chloride (CAS: 7647-01-0)

PEL (Inhalation): (C) 7 mg/m³ (OSHA)

OSHA Annotated Table Z-1, www.osha.gov

3. Hydrogen chloride (CAS: 7647-01-0)

PEL (Inhalation): (C) 5 ppm (Cal/OSHA)

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OSHA Annotated Table Z-1, www.osha.gov

4. Hydrogen chloride (CAS: 7647-01-0)

REL (Inhalation): (C) 5 ppm (NIOSH)

OSHA Annotated Table Z-1, www.osha.gov

8.2 Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

8.3 Individual protection measures, such as personal protective equipment (PPE)

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

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Wearing appropriate chemical resistant gloves and impervious apron is recommended.

Body protection

Wearing appropriate chemical resistant gloves and impervious apron is recommended.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. Use NIOSH approved respirator with organic vapor cartridge and full facepiece.

Thermal hazards

Wear appropriate thermal protective clothing when necessary.

Environmental exposure controls

Should not be released into the environment. See Section 12 for additional ecological information.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance/form	Liquid
Odor	Slightly Pungent
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	-15 F (-26.11C)
Initial boiling point and boiling range	362.52F (183.62C) estimated
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable
Upper/lower flammability limits	Not available.
Upper/lower explosive limits	Not available.

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Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	Not available.
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.

SECTION 10: Stability and reactivity

10.1 Reactivity

The product is stable and non-reactive under normal conditions of use, storage and transport.

10.2 Chemical stability

Chemical is stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous polymerization does not occur.

10.4 Conditions to avoid

Contact with incompatible materials.

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition products

No hazardous decomposition products are known.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

May cause respiratory irritation.

Skin corrosion/irritation

Causes severe skin burns.

Serious eye damage/irritation

Causes severe eye damage.

Respiratory or skin sensitization

Not a respiratory sensitizer. This product is not expected to cause skin sensitization.

Germ cell mutagenicity

No data available.

Carcinogenicity

This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

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Reproductive toxicity

This product is not expected to cause reproductive or developmental effects.

Summary of evaluation of the CMR properties

This product is not expected to contribute to any of these properties.

STOT-single exposure

May cause damage to organs. May cause respiratory irritation.

STOT-repeated exposure

Not classified

Aspiration hazard

Not an aspiration hazard.

SECTION 12: Ecological information

Toxicity

This product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability

No data is available on the degradability of this product.

Bioaccumulative potential

No data is available.

Mobility in soil

No data is available.

Results of PBT and vPvB assessment

No data is available.

Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

SECTION 13: Disposal considerations

Disposal of the product

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

Disposal of contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

Waste treatment

Dispose of in accordance with local regulations.

Sewage disposal

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Do not allow.

Other disposal recommendations

Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION 14: Transport information

DOT (US)

UN Number: UN2582

Class: 8

Packing Group: III

Proper Shipping Name: Ferric Chloride, Solution

Reportable quantity (RQ): 1,000 lbs

Marine pollutant:

Poison inhalation hazard:

IMDG

UN Number:

Class:

Packing Group:

EMS Number:

Proper Shipping Name:

IATA

UN Number:

Class:

Packing Group:

Proper Shipping Name:

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

Massachusetts Right To Know Components

Chemical name: Ferric chloride

CAS number: 7705-08-0

New Jersey Right To Know Components

Common name: IRON CHLORIDE

CAS number: 7705-08-0

Pennsylvania Right To Know Components

Chemical name: Iron chloride

CAS number: 7705-08-0

Massachusetts Right To Know Components

Chemical name: Hydrochloric acid

CAS number: 7647-01-0

New Jersey Right To Know Components

Common name: HYDROGEN CHLORIDE

CAS number: 7647-01-0

Pennsylvania Right To Know Components

Chemical name: Hydrochloric acid

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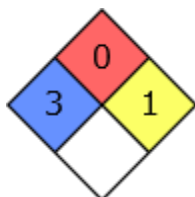
Ferric Chloride 38-42%

CAS number: 7647-01-0

HMIS Rating

Ferric Chloride 38-42%	
HEALTH	3
FLAMMABILITY	
PHYSICAL HAZARD	
PERSONAL PROTECTION	

NFPA Rating



SECTION 16: Other information

16.1 Further information/disclaimer

The information contained herein is accurate to the best of our knowledge. However, data, safety standards and government regulations are subject to change and, therefore, holders and users should satisfy themselves that they are aware of all current data and regulations relevant to their particular use of product. NAPCO CHEMICAL COMPANY, INC. DISCLAIMS ALL LIABILITY FOR RELIANCE ON THE COMPLETENESS OR ACCURACY OR THE INFORMATION INCLUDED HEREIN. NAPCO CHEMICAL COMPANY, INC. MAKES NO WARRANTY, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR PARTICULAR USE OR PURPOSE OF THE PRODUCT DESCRIBED HEREIN. All conditions relating to storage, handling, and use of the product are beyond the control of NAPCO Chemical Company, Inc., and shall be the sole responsibility of the holder or user of the product.