

SAFETY DATA SHEET

FERRIC CHLORIDE 40%

Page: 1

Compilation date: 20.08.02

Revision date: 05.12.22

Revision No: 9

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name: FERRIC CHLORIDE 40%

CAS number: 7705-08-0

EINECS number: 231-729-4

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of substance / mixture: PC14: Metal surface treatment products, including galvanic and electroplating products.

PC20: Products such as pH-regulators, flocculants, precipitants, neutralization agents.

PC37: Water treatment chemicals.

1.3. Details of the supplier of the safety data sheet

Company name:

Intaglio Printmaker Ltd

9 Playhouse Court

62 Southwark Bridge Road

London

SE10AT

Tel: 02079282633

Fax: info@intaglioprintmaker.com

Email:

1.4. Emergency telephone number

Emergency tel: 02079282633

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: Eye Irrit. 2: H319; Skin Corr. 1C: H314

Most important adverse effects: Causes severe skin burns and eye damage. Causes serious eye irritation.

2.2. Label elements

Label elements:

Hazard statements: H314: Causes severe skin burns and eye damage.

H319: Causes serious eye irritation.

Hazard pictograms: GHS05: Corrosion



SAFETY DATA SHEET

FERRIC CHLORIDE 40%

Page: 2

Signal words: Danger

Precautionary statements: P260: Do not breathe vapours.

P280: Wear protective clothing.

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water .

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.

2.3. Other hazards

PBT: This product is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

FERRIC CHLORIDE O GRADE

EINECS	CAS	PBT / WEL	CLP Classification	Percent
231-729-4	7705-08-0	-	Eye Dam. 1: H318; Skin Corr. 1C: H314	30-50%

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin.

Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Transfer to hospital if there are burns or symptoms of poisoning.

Eye contact: Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination.

Ingestion: Do not induce vomiting. Give 1 cup of water to drink every 10 minutes. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. Transfer to hospital as soon as possible.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. If conscious, ensure the casualty sits or lies down. If breathing becomes bubbly, have the casualty sit and provide oxygen if available. Transfer to hospital as soon as possible.

4.2. Most important symptoms and effects, both acute and delayed

Skin contact: Irritation or pain may occur at the site of contact. There may be redness or whiteness of the skin in the area of exposure. Blistering may occur. Severe burns may occur.

[cont...]

SAFETY DATA SHEET

FERRIC CHLORIDE 40%

Page: 3

Eye contact: There may be irritation and redness. There may be severe pain. The eyes may water profusely. Corneal burns may occur.

Ingestion: There may be soreness and redness of the mouth and throat. There may be difficulty swallowing. Corrosive burns may appear around the lips. Nausea and stomach pain may occur. There may be vomiting.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest. There may be coughing and a sore throat. There may be congestion of the lungs causing severe shortness of breath. There may be loss of consciousness.

4.3. Indication of any immediate medical attention and special treatment needed

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Use extinguisher suitable to material on fire.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: Corrosive. Harmful vapours may be evolved

5.3. Advice for fire-fighters

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

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Refer to section 8 of SDS for personal protection details.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method. Wash the spillage site with large amounts of water.

6.4. Reference to other sections

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Ensure there is sufficient ventilation of the area. Avoid direct contact with the substance.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed.

Suitable packaging: High density polyethylene. Polypropylene. PVC.

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SAFETY DATA SHEET

FERRIC CHLORIDE 40%

Page: 4

7.3. Specific end use(s)

Specific end use(s): PC14: Metal surface treatment products, including galvanic and electroplating products.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits: No data available.

DNEL/PNEC Values

DNEL / PNEC No data available.

8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area.

Respiratory protection: Gas/vapour filter, type B: inorganic vapours excl. CO (EN141). Self-contained breathing apparatus must be available in case of emergency.

Hand protection: Protective gloves.

Eye protection: Safety goggles. Face-shield. Ensure eye bath is to hand.

Skin protection: Protective clothing with elasticated cuffs and closed neck. Boots made of PVC. PVC apron covering the tops of the boots. Ensure safety shower is to hand.

Environmental: Refer to specific Member State legislation for requirements under Community environmental legislation.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Dark brown

Odour: Slightly acrid

Evaporation rate: Negligible

Oxidising: Non-oxidising (by EC criteria)

Solubility in water: Highly soluble

Also soluble in: Methanol. Diethyl ether.

Viscosity: Non-viscous

Boiling point/range°C: 106

Melting point/range°C: No data available.

Flammability limits %: lower: Not applicable.

upper: Not applicable.

Flash point°C: Not applicable.

Part.coeff. n-octanol/water: No data available.

Autoflammability°C: Not applicable.

Vapour pressure: 40mm Hg @ 35C

Relative density: 1.40

pH: <2

VOC g/l: Not applicable.

9.2. Other information

Other information: No data available.

SAFETY DATA SHEET

FERRIC CHLORIDE 40%

Page: 5

Section 10: Stability and reactivity

10.1. Reactivity

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

10.4. Conditions to avoid

Conditions to avoid: Heat.

10.5. Incompatible materials

Materials to avoid: Strong acids. Strong bases. Copper. Steel. Iron. Avoid contact with products containing hypochlorite (bleach type products) as toxic Chlorine gas may be evolved.

10.6. Hazardous decomposition products

Haz. decomp. products: Harmful vapours may be evolved.

Section 11: Toxicological information

11.1. Information on toxicological effects

Relevant hazards for product:

Hazard	Route	Basis
Skin corrosion/irritation	DRM	Hazardous: calculated
Serious eye damage/irritation	OPT	Hazardous: calculated

Symptoms / routes of exposure

Skin contact: Irritation or pain may occur at the site of contact. There may be redness or whiteness of the skin in the area of exposure. Blistering may occur. Severe burns may occur.

Eye contact: There may be irritation and redness. There may be severe pain. The eyes may water profusely. Corneal burns may occur.

Ingestion: There may be soreness and redness of the mouth and throat. There may be difficulty swallowing. Corrosive burns may appear around the lips. Nausea and stomach pain may occur. There may be vomiting.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest. There may be coughing and a sore throat. There may be congestion of the lungs causing severe shortness of breath. There may be loss of consciousness.

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values: No data available.

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SAFETY DATA SHEET

FERRIC CHLORIDE 40%

Page: 6

12.2. Persistence and degradability

Persistence and degradability: No data available.

12.3. Bioaccumulative potential

Bioaccumulative potential: No data available.

12.4. Mobility in soil

Mobility: Soluble in water.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: Expected to be toxic to aquatic organisms.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Land treatment (e.g. biodegradation of liquid or sludge discards in soils, etc.).

Recovery operations: Recycling/reclamation of other inorganic materials.

Waste code number: 11 01 99

Disposal of packaging: Arrange for collection by specialised disposal company.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

14.1. UN number

UN number: UN2582

14.2. UN proper shipping name

Shipping name: FERRIC CHLORIDE SOLUTION
(FERRIC CHLORIDE)

14.3. Transport hazard class(es)

Transport class: 8

14.4. Packing group

Packing group: III

14.5. Environmental hazards

Environmentally hazardous: No

Marine pollutant: No

14.6. Special precautions for user

Special precautions: No special precautions.

Tunnel code: E

Transport category: 3

[cont...]

SAFETY DATA SHEET

FERRIC CHLORIDE 40%

Page: 7

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Transport in bulk: Non-applicable

Section 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Specific regulations: For use only by suitably trained individuals. Control of Substances Hazardous to Health Regulations 2002 (COSHH).

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16: Other information

Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830.

* indicates text in the SDS which has changed since the last revision.

This safety data sheet is prepared in accordance with Commission Regulation (EC) No 1272/2008.

This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

Phrases used in s.2 and s.3: H314: Causes severe skin burns and eye damage.

H318: Causes serious eye damage.

H319: Causes serious eye irritation.

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