

SAFETY DATA SHEET

Version 1

Issuing Date: 30-Apr-2020

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product code 991129

Product Name Iron Solution for DM122P /DM133P

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

Product Use Laboratory chemicals.

Uses advised against No information available.

1.3. Details of the supplier of the safety data sheet

Supplier
FUJIFILM Europe B.V.
Oudenstaart 1
5047 TK Tilburg
The Netherlands

Manufactured by
FUJIFILM Irvine Scientific, Inc.
2511 Daimler Street
Santa Ana, CA 92705
U.S.A.

For further information, please contact:

Company Phone Number Telephone: +31 13 579 19 11
Fax: +31 13 570 11 15

E-mail Address reach_feg@fujifilm.com

1.4. Emergency telephone number

Europe	+49 (0)211 5089 137 (9:00 a.m. to 6 p.m.)
United Kingdom	CHEMTREC UK: +(44)-870-8200418

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Serious eye damage/eye irritation

Category 2

Hazard Statements

Causes serious eye irritation

2.2. Label elements



Signal Word

Warning

Hazard Statements

H319 - Causes serious eye irritation

Precautionary Statements - EU (§28, 1272/2008)

P280 - Wear protective gloves and eye/face protection

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P337 + P313 - If eye irritation persists: Get medical advice/ attention

2.3. Other hazards

No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Chemical Name	EC No	CAS No	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH registration number
Ferric Chloride	231-729-4	7705-08-0	0.5-1.5%	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318)	no data available

Full text of H- and EUH-phrases: see section 16

4. FIRST AID MEASURES

4.1. Description of first aid measures

General advice

If symptoms persist, call a physician.

Eye contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Skin contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention if irritation develops and persists.

Ingestion If swallowed, do not induce vomiting - seek medical advice.

Inhalation Move to fresh air. If symptoms persist, call a physician.

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

May cause redness, itching, and pain.

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

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media

Use CO₂, dry chemical, or foam.

Unsuitable Extinguishing Media

No information available.

5.2. Special hazards arising from the substance or mixture

None known.

Hazardous Combustion Products

Carbon oxides. Hydrogen chloride.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective suit.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid contact with the skin and the eyes.

6.2. Environmental precautions

Prevent product from entering drains.

6.3. Methods and material for containment and cleaning up

Prevent further leakage or spillage if safe to do so.

Use personal protective equipment. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly. After cleaning, flush away traces with water.

6.4. Reference to other sections

See section 7 for more information.

See section 8 for more information.

See Section 12 for additional Ecological Information.

See section 13 for more information.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Wear personal protective equipment. Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists. Ensure adequate

ventilation.

7.2. Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Keep at temperatures between 2 and 8 °C (35 and 46 °F).

7.3. Specific end use(s)

Laboratory chemicals.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limit value

Chemical Name	European Union	United Kingdom	France	Spain	Germany
Ferric Chloride				TWA: 1 mg/m ³	
Chemical Name	Italy	Portugal	Netherlands	Finland	Denmark
Ferric Chloride		TWA: 1 mg/m ³			TWA: 1 mg/m ³
Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
Ferric Chloride		TWA: 1 mg/m ³		TWA: 1 mg/m ³ STEL: 2 mg/m ³	TWA: 1 mg/m ³ STEL: 2 mg/m ³

Chemical Name	Australia	New Zealand WEL	ACGIH TLV
Ferric Chloride	1 mg/m ³	TWA: 1 mg/m ³	TWA: 1 mg/m ³ Fe

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Engineering Measures

Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye Protection

If splashes are likely to occur, wear safety glasses with side-shields.

Hand Protection

Wear protective gloves.

Skin and body protection

Long sleeved clothing.

Respiratory protection

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General Hygiene Considerations

When using do not eat, drink or smoke. Take off contaminated clothing and wash before reuse. Regular cleaning of equipment, work area and clothing is recommended.

Environmental Exposure Controls

No information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear, green, brown	Odor	No information available
Odor Threshold	No information available	Physical State @20°C	Liquid
pH	2.4 - 3.2	Flash point	No information available
Boiling point / boiling range	No information available	Decomposition temperature	No information available
Autoignition temperature	No information available	Freezing Point	No information available
Melting point / melting range	No information available	Flammability Limit in Air	No information available
Flammability (solid, gas)	No information available	Explosive Properties	No information available
Oxidizing Properties	No information available	Solubility	No information available
Specific Gravity	No information available	Vapor Pressure	No information available
Evaporation rate	No information available	Density	No information available
Vapor density	No information available	Partition coefficient: n-octanol/water	No information available
Dynamic viscosity			

10. STABILITY AND REACTIVITY

10.1. Reactivity

Stable under recommended storage conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization does not occur.

10.4. Conditions to avoid

Freezing. Protect from light.

10.5. Incompatible materials

Strong oxidizing agents. Strong acids. Strong bases.

10.6. Hazardous decomposition products

None under normal use conditions.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Product Information

Acute toxicity

Inhalation

No known effects under normal use conditions.

Eyes

Irritating to eyes. May cause redness and tearing.

Skin

Causes mild skin irritation.

Ingestion

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Component Information

Chemical Name	Oral LD50	Dermal LD50	LC50 (lethal concentration)
Ferric Chloride	= 450 mg/kg (Rat) = 316 mg/kg (Rat)		

Chronic toxicity

Carcinogenicity

There are no known carcinogenic chemicals in this product.

Corrosivity

None known.

Irritation

Irritating to eyes. Mild skin irritant.

Sensitization

None known.

Reproductive Toxicity

None known.

Mutagenic Effects None known.

Target Organ Effects Eyes. Skin.

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity

The environmental impact of this product has not been fully investigated

Chemical Name	Algae toxicity	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
Ferric Chloride		Pimephales promelas: 20.95 - 22.56 mg/L at 96 h		9.6: 48 h Daphnia magna mg/L EC50 Static

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

Chemical Name	Octanol Water Partition Coefficient (log pow)
Ferric Chloride	-4

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

No information available.

12.6. Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues/unused products Dispose of in accordance with federal, state and local regulations.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

ADG Not regulated

RID Not regulated

ADR/RID Not regulated

IMDG Not regulated

ICAO Not regulated

IATA Not regulated

Special precautions for users No information available.

15. REGULATORY INFORMATION

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

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Take note of Directive 94/33/EC on the protection of young people at work.

International Inventories

TSCA	No
EINECS/ELINCS	No
DSL/NDSL	No
AICS	Yes
NZIoC	Yes

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

15.2. Chemical safety assessment

No information available.

16. OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3

H302 - Harmful if swallowed

H315 - Causes skin irritation

H318 - Causes serious eye damage

H319 - Causes serious eye irritation

Prepared By FUJIFILM Environment, Health and Safety, phone: (01) (800) 473-3854

Revision Date 30-Apr-2020

Revision Note CLP Annex VI harmonized classification(s) and/or available REACH registration information are the primary data sources referenced in determining the classification of this product.

This safety data sheet complies with the requirements of: Regulation (EC) No 1272/2008.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.