Version 6.1 SAFETY DATA SHEET Revision Date 14.03.2021 according to Regulation (EC) No. 1907/2006 Print Date 03.04.2021 GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA SECTION 1: Identification of the substance/mixture and of the company/undertaking 1.1 **Product identifiers** Product name Ammonium iron(II) sulfate hexahydrate for analysis EMSURE® ISO : 1.03792 Product Number Catalogue No. : 103792 Brand : Millipore REACH No. 01-2120766164-53-XXXX : CAS-No. 7783-85-9 : 1.2 Relevant identified uses of the substance or mixture and uses advised against : Reagent for development and research Identified uses 1.3 Details of the supplier of the safety data sheet : Merck KGaA Company Frankfurter Str. 250 D-64271 DARMSTADT : +49 (0)6151 72-0 Telephone Fax +49 6151 727780 : E-mail address : TechnicalService@merckgroup.com 1.4 Emergency telephone Emergency Phone # : +(44)-870-8200418 (CHEMTREC (GB)) +(353)-19014670 (CHEMTREC Ireland) 001-803-017-9114 (CHEMTREC India)

SECTION 2: Hazards identification

Classification of the substance or mixture 2.1

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

2.2 Label elements

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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Page 1 of 8



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SECTION 3: Composition/information on ingredients

3.1 Substances

Molecular weight	:	392,14 g/mol
CAS-No.	:	7783-85-9

No components need to be disclosed according to the applicable regulations.

SECTION 4: First aid measures

4.1 Description of first-aid measures

If inhaled

After inhalation: fresh air.

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

In case of eye contact

After eye contact: rinse out with plenty of water. Remove contact lenses.

If swallowed

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Nature of decomposition products not known. Not combustible. Fire may cause evolution of: nitrogen oxides, Sulfur oxides Ambient fire may liberate hazardous vapours.

5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.

5.4 Further information

Prevent fire extinguishing water from contaminating surface water or the ground water system.

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Page 2 of 8





SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

6.2 Environmental precautions Do not let product enter drains.

- **6.3 Methods and materials for containment and cleaning up** Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.
- **6.4** Reference to other sections For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions Tightly closed. Dry.

Recommended storage temperature see product label.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with workplace control parameters

8.2 Exposure controls

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

Skin protection

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Full contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm

Break through time: 480 min

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Page 3 of 8

Material tested: KCL 741 Dermatril® L

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Splash contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min

Material tested: KCL 741 Dermatril® L

Respiratory protection

required when dusts are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system. Recommended Filter type: Filter type P1

The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Control of environmental exposure

Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a)	Appearance	Form: solid Color: blue green
b)	Odor	odorless
c)	Odor Threshold	Not applicable
d)	рН	3 - 5 at 50 g/l at 20 °C
e)	Melting point/freezing point	Melting point: 39 - 41 °C - Elimination of water of crystallization
f)	Initial boiling point and boiling range	Not applicable
g)	Flash point	Not applicable
h)	Evaporation rate	No data available
i)	Flammability (solid, gas)	The product is not flammable.
j)	Upper/lower flammability or explosive limits	No data available
k)	Vapor pressure	No data available
I)	Vapor density	No data available

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Page 4 of 8

m)	Relative density	No data available

- n) Water solubility 269 g/l at 20 °C
- o) Partition coefficient: No data available n-octanol/water
- p) Autoignition No data available temperature
- q) Decomposition No data available temperature
- r) Viscosity Viscosity, kinematic: No data available Viscosity, dynamic: No data available
- s) Explosive properties No data available
- t) Oxidizing properties No data available

9.2 Other safety information

Bulk density ca.900 kg/m3

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability The product is chemically stable under standard ambient conditions (room temperature) .

- **10.3 Possibility of hazardous reactions** no information available
- **10.4 Conditions to avoid** no information available
- **10.5 Incompatible materials** No data available
- **10.6 Hazardous decomposition products** In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - 3.250 mg/kg Remarks: (RTECS)

Skin corrosion/irritation No data available

Serious eye damage/eye irritation No data available

Respiratory or skin sensitization No data available

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Page 5 of 8



Germ cell mutagenicity

No data available

Carcinogenicity

No data available

IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard No data available

11.2 Additional Information

Not available

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish

LC50 - Fundulus heteroclitus (Mummichog) - 315 mg/l - 48 h Remarks: (ECOTOX Database) (anhydrous substance)

- 12.2 Persistence and degradability No data available
- **12.3 Bioaccumulative potential** No data available
- 12.4 Mobility in soil No data available

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Discharge into the environment must be avoided. No data available

Millipore- 1.03792

Page 6 of 8





SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

SECTION 14: Transport information				
14.1 UN number ADR/RID: -	IMDG: -	IATA: -		
14.2 UN proper shipping name ADR/RID: Not dangerous goo IMDG: Not dangerous goo IATA: Not dangerous goo	ds			
14.3 Transport hazard class(es) ADR/RID: -	IMDG: -	IATA: -		
14.4 Packaging group ADR/RID: -	IMDG: -	IATA: -		
14.5 Environmental hazards ADR/RID: no	IMDG Marine pollutant: no	IATA: no		
14.6 Special precautions for use	r			

Further information

Not classified as dangerous in the meaning of transport regulations.

SECTION 15: Regulatory information

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

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

: Not applicable

National legislation

Seveso III: Directive 2012/18/EU of the
European Parliament and of the Council on the
control of major-accident hazards involving
dangerous substances.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

SECTION 16: Other information

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to

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Page 7 of 8

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Page 8 of 8