

Ferric-EDDHA

Safety Data Sheet

according to Regulation (EU) 2015/830

Date of issue: 25/04/2012 Revision date 29/10/2018
Supersedes 17/01/2018

F0527

Version: 2.2

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

1.1. Product identifier

Product form : Substance
Substance name : Ferric-EDDHA
EC-No. : 283-044-5
CAS-No. : 84539-55-9
REACH registration No : 01-2119487279-21
Product code : F0527
Synonyms : Ethylenediamine Dihydroxyphenyl acetate ferric

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

1.2.1. Relevant identified uses

Main use category : Professional use
Industrial/Professional use spec : For professional use only. Duchefa Biochemie B.V. products are intended only for "in vitro laboratory" research purposes.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Duchefa Biochemie B.V.
A. Hofmanweg 71
2031 BH Haarlem - The Netherlands
T +31(0)23-5319093 - F +31(0)23-5318027
info@duchefa.nl

1.4. Emergency telephone number

Emergency number : Supplier contact information:
+31(0)23-5319093 (M-F 09:00-17:00)
+31(0)6-30109355 (outside office hours)

Organisation/Company	Address	Comment
World Health Organization world directory of poison centres	http://apps.who.int/poisoncentres/	Consult website for a local poison centre

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

No labelling applicable

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Name	Product identifier	%
Ferric-EDDHA	(CAS-No.) 84539-55-9 (EC-No.) 283-044-5 (REACH-no) 01-2119487279-21	100

Full text of H-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Seek medical attention if ill effect or irritation develops.
 First-aid measures after inhalation : Assure fresh air breathing.
 First-aid measures after skin contact : Wash skin with mild soap and water.
 First-aid measures after eye contact : Rinse with water.
 First-aid measures after ingestion : Rinse mouth out with water
 Drink plenty of water
 Do NOT induce vomiting.

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

No additional information available

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Dry powder
 Alcohol resistant foam.
 Water spray.
 Unsuitable extinguishing media : Carbon dioxide (CO₂). Strong water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Thermal decomposition generates :
 - CO_x
 - NO_x
 - SO_x.

5.3. Advice for firefighters

Firefighting instructions : Prevent fire fighting water from entering the environment.
 Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Spill should be handled by trained cleaning personnel properly equipped with respiratory and eye protection.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Measures in case of dust release : Avoid dust formation.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Sweep up dry powder and dispose properly.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Handle in accordance with good industrial hygiene and safety procedures. Avoid dust formation.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in dry, well-ventilated area

Keep container tightly closed.

Store at room temperature.

7.3. Specific end use(s)

For professional use only. Duchefa Biochemie B.V. products are intended only for "in vitro laboratory" research purposes.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Ferric-EDDHA (84539-55-9)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	0,8 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	1,8 mg/m ³
DNEL/DMEL (General population)	
Long-term - systemic effects, oral	125 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	435 mg/m ³
Long-term - systemic effects, dermal	417 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	2,4 mg/l
PNEC aqua (marine water)	0,24 mg/l
PNEC aqua (intermittent, freshwater)	1,2 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	1,9 mg/kg dwt
PNEC sediment (marine water)	0,19 mg/kg dwt
PNEC (Soil)	

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Ferric-EDDHA (84539-55-9)	
PNEC soil	1,6 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	45 mg/l

8.2. Exposure controls

Hand protection:

Type	Material	Permeation	Thickness (mm)	Standard
Gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0,11	EN 374

Eye protection:

Safety glasses (to European standard EN 166 or equivalent)

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

Dust production: dust mask with filter type P1

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Powder.
Colour	: Black Red.
Odour	: Weak.
Odour threshold	: No data available
pH	: No data available
pH solution	: 8 - 9 10 g/l
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: > 500 °C (1.013 hPa)
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: 270 °C
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 1,5892 g/cm ³ (at 20 °C)
Solubility	: Water: 150 - 203 g/l (at 23 °C)
Log Pow	: No data available
Log Kow	: -4,2 (at 23 °C)
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available

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Explosive limits : No data available

9.2. Other information

Bulk density : 600 - 800 kg/m³

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

High temperature

Moisture.

10.5. Incompatible materials

Strong oxidizers

Strong bases.

10.6. Hazardous decomposition products

When heated to decomposition, emits dangerous fumes:

- CO_x

- NO_x

- SO_x.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Ferric-EDDHA (84539-55-9)	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rat	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 4,2 mg/l/4h

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Not classified

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ferric-EDDHA (84539-55-9)	
LC50 fish 1	> 120 mg/l Brachydanio rerio (zebra-fish)

12.2. Persistence and degradability

Ferric-EDDHA (84539-55-9)	
Persistence and degradability	Minimally biodegradable.

12.3. Bioaccumulative potential

Ferric-EDDHA (84539-55-9)	
Log Kow	-4,2 (at 23 °C)

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Additional information : Avoid release to the environment. Prevent entry to sewers and public waters

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

In accordance with ADR / IATA / IMDG

ADR	IMDG	IATA
14.1. UN number		
Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name		
Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)		
Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable
14.4. Packing group		
Not applicable	Not applicable	Not applicable
14.5. Environmental hazards		
Not applicable	Not applicable	Not applicable
No supplementary information available		

14.6. Special precautions for user

Overland transport

Not applicable

- Transport by sea

Not applicable

- Air transport

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Ferric-EDDHA is not on the REACH Candidate List

Ferric-EDDHA is not on the REACH Annex XIV List

15.1.2. National regulations

Germany

Reference to AwSV

: Water hazard class (WGK) 1, low hazard to water (Classification according to VwVwS, Annex 3; ID No. 8485)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV

: Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen

: Ferric-EDDHA is listed

SZW-lijst van mutagene stoffen

: Ferric-EDDHA is listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding

: The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen –

: The substance is not listed

Vruchtbaarheid

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling

: The substance is not listed

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Indication of changes:

8.1	Additional information	Added	
9.1	Log Kow	Modified	Fixed missing value
9.2	Bulk density	Added	

Abbreviations and acronyms:

ATE	Acute Toxicity Estimate
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
BCF	Bioconcentration factor
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DPD	Dangerous Preparations Directive 1999/45/EC
DSD	Dangerous Substances Directive 67/548/EEC

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IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
PBT	Persistent Bioaccumulative Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
SDS	Safety Data Sheet

Data sources : ECHA (European Chemicals Agency). Supplier. REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product