

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

1.1. Product identifier

Product form	: Substance
Trade name	: Fe-EDDHA 6% 4,0% ortho/ortho
Chemical name	: ethylenediamine-N,N-bis(2-hydroxyphenylacetic acid), ferric sodium complex
IUPAC name	: Acetic acid, oxo-, sodium salt, reaction products with ethylenediamine and phenol, iron sodium salts
EC-No.	: 283-044-5
CAS-No.	: 84539-55-9
REACH registration No	: 01-2119487279-21
Product code	: 150212176, 150212177
Type of product	: Fertilizer
Product group	: Trade product

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
Use of the substance/mixture	: Fertilizer
Function or use category	: Fertilisers

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Easygro
Woutersweg 10
P.O. Box 2
2691 PR 's Gravenzande - Nederland
T +31 (0) 174 446 100 - F +31 (0) 174 446 150
SDS@brinkman.nl - www.royalbrinkman.com

1.4. Emergency telephone number

No additional information available

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

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. Label elements

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

Labelling according to Directive 67/548/EEC or 1999/45/EC

2.3. Other hazards

Fe-EDDHA 6% 4,0% ortho/ortho

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according to Regulation (EC) No. 453/2010

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type : Mono-constituent

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Easygro Fe-EDDHA 6% (4,0% o-o)	(CAS-No.) 84539-55-9 (EC-No.) 283-044-5 (REACH-no) 01-2119487279-21	100	Not classified

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 : Remove contaminated clothes.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Wash skin with plenty of water.
First-aid measures after eye contact : Rinse eyes with water as a precaution.
First-aid measures after ingestion : Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

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

Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.
Unsuitable extinguishing media : Do not use a heavy water stream. Do not use carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Precautionary measures fire : Approach from upwind.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
Other information : Do not allow run-off from fire-fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid breathing dust, mist or spray.

6.1.1. For non-emergency personnel

Protective equipment : Wear suitable protective clothing.
Emergency procedures : Ventilate spillage area.
Measures in case of dust release : Avoid dust production.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.
Methods for cleaning up : Mechanically recover the product.
Other information : Dispose of materials or solid residues at an authorized site.

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6.4. Reference to other sections

For further information refer to section 13. For further information refer to section 8: "Exposure controls/personal protection".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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DNEL/DMEL (Workers)

Long-term - systemic effects, dermal 0.8 mg/kg bodyweight/day

Long-term - systemic effects, inhalation 1.8 mg/m³

DNEL/DMEL (General population)

Long-term - systemic effects, oral 0.417 mg/kg bodyweight/day

Long-term - systemic effects, inhalation 0.435 mg/m³

Long-term - systemic effects, dermal 0.125 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)

PNEC soil 1.6 mg/kg dwt

PNEC (Oral)

PNEC oral (secondary poisoning) 1.1 mg/kg food

PNEC (STP)

PNEC sewage treatment plant 45 mg/l

8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Hand protection : Protective gloves

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR), Chloroprene rubber (CR), Polyvinylchloride (PVC)	6 (> 480 minutes)	0.11		EN ISO 374

Eye protection : Safety glasses

Type	Field of application	Characteristics	Standard
Safety glasses with side shields	Dust		EN 166

Skin and body protection : Wear suitable protective clothing

Type	Standard
According to the conditions of use, protective gloves, apron, boots, head and face protection must be worn	EN 14605, EN ISO 13982

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment

Device	Filter type	Condition	Standard
Respiratory protective device with a particle filter	Type P2	Protection for Solid particles	EN 143, EN 149

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Environmental exposure controls : Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: red. Black.
Odour	: slight.
Odour threshold	: No data available
pH	: 7 – 9 10 g/l
pH solution	: 1 %
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: > 500 °C
Freezing point	: Not applicable
Boiling point	: No data available
Flash point	: Not applicable
Auto-ignition temperature	: 331 °C Not applicable
Decomposition temperature	: 270 °C
Flammability (solid, gas)	: Non flammable.
Vapour pressure	: No data available
Vapour pressure at 50 °C	: < 0.000001 hPa
Relative vapour density at 20 °C	: 1.5892
Relative density	: Not applicable
Density	: 500 – 800 kg/m ³
Solubility	: Water: 150 – 203 g/l
Partition coefficient n-octanol/water (Log Pow)	: < 4.2
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: Not applicable

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Keep away from strong acids, strong bases and oxidizing agents.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

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LD50 oral rat	> 2000 mg/kg
LD50 oral	> 2000 kilogram
LC50 Inhalation - Rat	> 4.2 mg/l/4h

Skin corrosion/irritation	: Not classified pH: 7 – 9 10 g/l
Serious eye damage/irritation	: Not classified pH: 7 – 9 10 g/l
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

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Viscosity, kinematic	Not applicable
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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
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LC50 - Fish [1]	> 120 mg/l
EC50 - Crustacea [1]	> 120 mg/l
EC50 72h - Algae [1]	> 294 mg/l

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

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Partition coefficient n-octanol/water (Log Pow)	< 4.2
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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	: No other effects known. Avoid release to the environment.
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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated

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14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available				

14.6. Special precautions for user

- Overland transport

Not regulated

- Transport by sea

Not regulated

- Air transport

Not regulated

- Inland waterway transport

Not regulated

- Rail transport

Not regulated

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

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

Fe-EDDHA 6% 4,0% ortho/ortho is not on the REACH Candidate List

Fe-EDDHA 6% 4,0% ortho/ortho is not on the REACH Annex XIV List

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
CLP	CLP = Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	DMEL = Derived Minimal Effect level
DNEL	DNEL = Derived-No Effect Level
DPD	Dangerous Preparations Directive 1999/45/EC
DSD	Dangerous Substances Directive 67/548/EEC
EC50	Median effective concentration
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail

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SDS	SDS = Safety Data Sheet
STP	Sewage treatment plant
vPvB	Very Persistent and Very Bioaccumulative

<Ontbrekende vertaling : />

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.