

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Rexolin E13

Version 1

Revision Date 04.02.2022

Print Date 04.05.2022

GR / EN

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Trade name : Rexolin E13

Substance name : Ethylenediaminetetraacetic acid, ferric-sodium complex

REACH Registration Number : 01-2119496228-27-0000

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

Use of the Substance/Mixture	: Industry category:	Agriculture, forestry, fishery
	Specific use(s):	Chelating agent
		Plant nutrient

1.3 Details of the supplier of the safety data sheet

Company : Nouryon
Functional Chemicals B.V.
Velperweg 76
NL 6824 BM Arnhem
Netherlands

Telephone : +31263664433

Telefax :

E-mail address : sds_chelates@nouryon.com

1.4 Emergency telephone number

Emergency telephone number : 24 hours:+31 57 06 79211, CHEMTREC-USA:1-800-424-9300, CHEMTREC outside USA +1-703-527-3887, CANUTEC-CANADA:1-613-996-6666,
化学事故应急咨询电话：国家化学事故应急响应中心 +86 532 8388 9090

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)
Not a hazardous substance or mixture.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

2.3 Other hazards

Risk of dust explosion.

No further data available.

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.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Common Name	: Ethylenediaminetetraacetic acid, ferric sodium complex, trihydrate
Pure substance/mixture	: Substance
Remarks	: No ingredients according to the criteria in Regulation (EC) No. 1907/2006 (Annex II).

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General advice	: No hazards which require special first aid measures.
If inhaled	: Remove to fresh air. Keep patient warm and at rest. Rinse nose and mouth with water.
In case of skin contact	: Remove contaminated clothing and shoes. Rinse with water.
In case of eye contact	: Rinse with plenty of water. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing.
If swallowed	: Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms	: The symptoms and effects are as expected from the hazards as shown in section 2. No specific product related symptoms are known.
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4.3 Indication of any immediate medical attention and special treatment needed

Treatment	: Treat symptomatically.
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SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media	: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
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5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting / Specific hazards arising from the chemical	: Risks of ignition followed by flame propagation or secondary explosions shall be prevented by avoiding accumulation of dust, e.g. on floors and ledges.
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Combustion products : Fire will produce smoke containing hazardous combustion products (see section 10).

5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
Further information : Standard procedure for chemical fires.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Avoid dust formation.
Emergency measures on accidental release : Follow safe handling advice and personal protective equipment recommendations.

6.2 Environmental precautions

Environmental precautions : No special environmental precautions required.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up / Methods for containment : Sweep up and shovel.
Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal considerations see section 13.
For personal protection see section 8.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Advice on safe handling : For personal protection see section 8.
Avoid creating dust.
Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.
No special handling advice required.
Advice on protection against fire and explosion : Provide appropriate exhaust ventilation at places where dust is formed.
No sparking tools should be used.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep in a dry place.
Store at room temperature in the original container.
Keep container tightly closed.
Advice on common storage : No special restrictions on storage with other products.
Other data : No decomposition if stored and applied as directed.

7.3 Specific end use(s)

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Contains no substances with occupational exposure limit values.

Further occupational exposure limits

Description	Value type	Control parameters	Basis	Form of exposure
Dust	TWA	5 mg/m ³	GR OEL	Total dust

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
Ethylenediaminetetraacetic acid, ferric sodium complex	Workers	Inhalation	Long-term systemic effects	2 mg/m ³
	Workers	Inhalation	Acute local effects	74 mg/m ³
	Workers	Skin contact	Long-term systemic effects	4200 mg/kg
	Consumers	Ingestion	Long-term systemic effects	0,42 mg/kg
	Consumers	Inhalation	Long-term systemic effects	0,5 mg/m ³
	Consumers	Skin contact	Long-term systemic effects	2100 mg/kg

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
Ethylenediaminetetraacetic acid, ferric sodium complex	Fresh water	3,1 mg/l
	Intermittent water	1,09 mg/l
	Marine water	0,31 mg/l
	Sewage treatment plant	64 mg/l

8.2 Exposure controls

Engineering measures

Provide appropriate exhaust ventilation at places where dust is formed.

Personal protective equipment

Eye protection : Safety glasses

Hand protection
Material : Nitrile rubber

Respiratory protection : No personal respiratory protective equipment normally required.
In the case of dust, vapour or aerosol formation use a respirator with an approved filter.
Half mask with a particle filter P2 (EN 143)

Hygiene measures : General industrial hygiene practice.

Environmental exposure controls

General advice : No special environmental precautions required.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state	: crystalline
Colour	: yellow, green
Odour	: odourless
Odour Threshold	: Not applicable
Melting point	: Decomposes before melting.
Boiling point/boiling range	: Not applicable
Flammability (solid, gas)	: Not classified as a flammability hazard May form combustible dust concentrations in air during processing, handling or other means.
Upper explosion limit / Upper flammability limit	: Not applicable
Lower explosion limit / Lower flammability limit	: $\geq 40 \text{ g/m}^3$
Flash point	: Not applicable
Auto-ignition temperature	: $\geq 200 \text{ }^\circ\text{C}$ Method: Auto-ignition of a 5mm dust layer according to EN 50281-2-1
Decomposition temperature	
Decomposition temperature	: No data available
pH	: 4 - 5,5 1% (water)
Viscosity	
Viscosity, dynamic	: Not applicable
Viscosity, kinematic	: Not applicable
Solubility(ies)	
Water solubility	: ca. 90 g/l
Solubility in other solvents	: No data available

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Partition coefficient: n-octanol/water	:	log Pow: < 0
Vapour pressure	:	Not applicable
Relative density	:	No data available
Bulk density	:	900 - 1 000 kg/m ³
Relative vapour density	:	Not applicable

9.2 Other information

Explosives	:	Not explosive
Oxidizing properties	:	Not classified as oxidising.
Flammability (liquids)	:	Not applicable
Evaporation rate	:	Not applicable

This safety datasheet only contains information relating to safety and does not replace any product information or product specification.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Stable under normal conditions.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Dust may form explosive mixture in air.

10.4 Conditions to avoid

Conditions to avoid : None known.

10.5 Incompatible materials

Materials to avoid : None known.

10.6 Hazardous decomposition products

Hazardous decomposition products	:	Carbon oxides nitrogen oxides (NO _x)
Thermal decomposition	:	No data available

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Product information:

Acute toxicity : Not classified based on available information.

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Skin corrosion/irritation	:	Not classified based on available information.
Serious eye damage/eye irritation	:	Not classified based on available information.
Respiratory or skin sensitisation	:	Respiratory sensitisation: Not classified based on available information. Skin sensitisation: Not classified based on available information.
Germ cell mutagenicity	:	Not classified based on available information.
Carcinogenicity	:	Not classified based on available information.
Reproductive toxicity	:	Not classified based on available information.
STOT - single exposure	:	Not classified based on available information.
STOT - repeated exposure	:	Not classified based on available information.
Aspiration hazard	:	Not classified based on available information.
Further information	:	No further data available.
Test result		
Acute oral toxicity	:	LD50: > 2 000 mg/kg Species: Rat Method: OECD Test Guideline 423 The substance or mixture has no acute oral toxicity

11.2 Information on other hazards

Endocrine disrupting properties

Product:

Assessment	:	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
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SECTION 12: ECOLOGICAL INFORMATION

Product information:

Ecotoxicology Assessment

Additional ecological information	:	None known.
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12.1 Toxicity

Test result

Toxicity to fish	:	LC50: > 100 mg/l Exposure time: 96 h Species: Oncorhynchus mykiss (rainbow trout) Test Type: static test Method: OECD Test Guideline 203
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12.2 Persistence and degradability

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Product information:

Biodegradability : Result: Not readily biodegradable.

12.3 Bioaccumulative potential

Product information:

Bioaccumulation : Not expected considering the low log Pow value.

12.4 Mobility in soil

Product information:

Mobility : Adsorption to the solid soil particles is not expected.

12.5 Results of PBT and vPvB assessment

Product information:

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 Endocrine disrupting properties

Product information:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

Product information

: No information available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

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

SECTION 14: TRANSPORT INFORMATION

14.1 UN number

Not regulated as a dangerous good

14.2 Proper shipping name

Not regulated as a dangerous good

14.3 Transport hazard class

Not regulated as a dangerous good

14.4 Packing group

Not regulated as a dangerous good

14.5 Environmental hazards

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Not regulated as a dangerous good

14.6 Special precautions for user

Remarks : Not classified as dangerous in the meaning of transport regulations.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

SECTION 15: REGULATORY INFORMATION

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) : Not applicable

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : Not applicable

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

Regulation (EU) 2019/1021 on persistent organic pollutants (recast) : Not applicable

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals : Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances. Not applicable

Notification status

TCSI : YES. On the inventory, or in compliance with the inventory
TSCA : YES. All substances listed as active on the TSCA inventory
AIIC : YES. On the inventory, or in compliance with the inventory
DSL : YES. All components of this product are on the Canadian DSL
ENCS : YES. On the inventory, or in compliance with the inventory
ISHL : YES. On the inventory, or in compliance with the inventory
KECI : YES. On the inventory, or in compliance with the inventory
PICCS : YES. On the inventory, or in compliance with the inventory
IECSC : YES. On the inventory, or in compliance with the inventory
NZIoC : YES. On the inventory, or in compliance with the inventory

For explanation of abbreviation see section 16.

15.2 Chemical safety assessment

Product information : A Chemical Safety Assessment has been carried out for this

substance.

SECTION 16: OTHER INFORMATION

Full text of other abbreviations

GR OEL : Greece. Hellenic Institute for Occupational Health and Safety -
List of Limit Values
GR OEL / TWA : Time weighted average

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; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

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.

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