

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. If skin irritation persists, call a physician.

First-aid measures after 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.

First-aid measures after ingestion Rinse mouth

Most important symptoms and effects (acute and delayed)

Harmful if swallowed. Harmful if inhaled. Causes serious eye damage. May cause damage to organs through prolonged or repeated exposure.

Immediate medical attention and special treatment, if necessary

Treat symptomatically.

5. FIRE FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media Dry chemical, CO2, water spray or regular foam.

Unsuitable extinguishing media No information available

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Special protective equipment and precautions for fire-fighters

Firefighting instructions Eliminate all ignition sources if safe to do so. Move containers from fire area if it can be done without personal risk. Ensure adequate ventilation, especially in confined areas.

Protection during firefighting Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

General measures Evacuate personnel to safe areas.
Avoid contact with skin, eyes or clothing.
Ensure adequate ventilation, especially in confined areas.
Do not breathe dust/fume/gas/mist/vapors/spray.

For non-emergency personnel

Emergency procedures Ventilate spillage area.

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".

Environmental precautions

Do not discharge into drains/surface waters/groundwater.

Methods and material for containment and cleaning up

Methods and material for containment and cleaning up
Collect spillage.
Sweep up and shovel into suitable containers for disposal.
Avoid generation of dust.

Other information Dispose of materials or solid residues at an authorized site.

Reference to other sections

For further information refer to section 13.

7. HANDLING AND STORAGE

Precautions for safe handling

Precautions for safe handling Handle in accordance with good industrial hygiene and safety practice.
Avoid contact with skin, eyes or clothing.
Avoid generation of dust.
Do not breathe dust/fume/gas/mist/vapors/spray.

Hygiene measures Do not eat, drink or smoke when using this product.
Always wash hands after handling the product.

Conditions for safe storage, including any incompatibilities

Storage conditions Keep tightly closed in a dry and cool place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Derived No Effect Level (DNEL)

Inhalation	Worker - inhalative, long-term – local	1.5 mg/m ³
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	Worker - inhalative, short-term – local	3 mg/m ³
	Consumer - inhalative, long-term - local	0.6 mg/m ³
	Consumer - inhalative, short-term - local	1.2 mg/m ³
Oral	Consumer - oral, long-term - systemic	25 mg/kg bw/day

Predicted No Effect Concentration (PNEC)

Fresh Water 2.2 mg/L

Sea Water 0.22 mg/L

Intermittent releases to water
1.2 mg/L

Soil 0.72 mg/L

Impact on Sewage Treatment
43 mg/L

Appropriate engineering controls

Appropriate engineering controls Ensure good ventilation of the work station.

Environmental exposure controls Avoid release to the environment.

Individual protection measures/Personal protective equipment

Hand protection:

Wear chemically resistant gloves (tested to EN374) in combination with intensive management supervision controls.

Eye protection:

Wear safety glasses with side shields (or goggles).

Skin and body protection:

Suitable protective clothing.

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Solid
Appearance	White powder
Color	White
Odour	Odourless
Odour threshold	No data available

Revision Date: March 12, 2020

pH	10.5-11.5
Melting point	Decomposition > 150°C)
Freezing point	Not applicable
Boiling point	No data available
Flash point	Not applicable
Relative evaporation rate (butylacetate=1)	No data available
Flammability (solid, gas)	Not highly flammable solid. Combustible solid.
Vapour pressure	2E-012 hPa at 25°C)
Relative vapour density at 20 °C	No data available
Relative density	1. 67(20 °C)
Density	1. 67 g/cm ³ (20 °C)
Solubility	Water: 500 g/l (20°C)
Log Pow	No data available
Auto-ignition temperature	>200°C at 1013.25 hPa
Decomposition temperature	Decomposition > 150°C)
Viscosity, kinematic	Not applicable
Viscosity, dynamic	No data available
Explosive limits	Not applicable
Explosive properties	Non explosive.
Oxidising properties	No Oxidising

Other information

No additional information available

10. STABILITY AND REACTIVITY

Reactivity

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

Chemical stability

Stable under normal conditions.

Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

Conditions to avoid

Dust formation.

Incompatible materials

Strong oxidizing agents.

Hazardous decomposition products

Ammonia

Carbon oxides (CO_x)

Nitrogen oxides (NO_x)

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity Harmful if inhaled.

EDTA 4Na (13235-36-4)

LD50 rat (oral) mate	1913 mg/kg bw
LD50 rat (oral) female	1780 mg/kg bw
LD50 rat (oral) female/male	> 1780- <2000 mg/kg bw
LOAEC (inhalation)	Ca. 30 mg/m ³ air (male) based on: act. ingr. (Na ₂ H ₂ EDTA) (Basis for effect level: histopathology of the respiratory tract and lung weights)

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/irritation
Causes serious eye damage.Respiratory or skin sensitisation
No sensitization responses were observed.

Germ cell mutagenicity Not classified

Carcinogenicity Not classified

Reproductive toxicity Not classified

STOT-single exposure Not classified

STOT-repeated exposure May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard Not classified

12. ECOLOGICAL INFORMATION**Toxicity**

Ecology - general The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Chemical Name	Algae/aquatic plants	Fish	Crustacea
EDTA 4Na (13235-36-4)	EC50 (72 h): > 100 mg/L test mat. (nominal) based on: growth rate	LC50 (96 h): 41 mg/L test mat. (nominal) based on:	EC50 (48 h): 140 mg/L test mat. (nominal) based on:

	<p>EC50 (72 h): > 60 mg/L test mat. (meas. (geom. mean)) based on: growth rate NOEC (72 h): 79.4 mg/L test mat. (nominal) based on: growth rate NOEC (72 h): 48.4 mg/L test mat. (meas. (geom. mean)) based on: growth rate LOEC (72 h): 99.9 mg/L test mat. (nominal) based on: growth rate LOEC (72 h): 60.6 mg/L test mat. (meas. (geom. mean)) based on: growth rate[Akzo Nobel Chemicals Research, Environmental Chemistry Department (2001)]</p>	<p>mortality (34 - 62 mg/L, very soft water)[Batchelder TL, Alexander HC, McCarty WM (1980)] LC50 (96 h): 159 mg/L test mat. (nominal) based on: mortality (136-204 mg/L, medium hard water)[EU Risk Assessment (2004c)] LC50 (96 h): 532 mg/L test mat. (nominal) based on: mortality (473-598 mg/L, very hard water)[EU Risk Assessment (2004d)] NOEC (35 d): >= 25.7 mg/L act. ingr. (H4EDTA) (meas. (not specified))[BASF AG (2001b)]</p>	<p>mobility (100-180 mg/L)[BASF AG (1989)] NOEC (21 d): 25 mg/L test mat. (nominal) based on: reproduction[BASF AG (1998)]</p>
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Persistence and degradability

No additional information available

Bioaccumulative potential

Material does not bioaccumulate.

Mobility in soil

No additional information available

Other adverse effects

No additional information available

13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste treatment methods Dispose of contents/container in accordance with licensed collector's sorting instructions.

Sewage disposal recommendations
Disposal must be done according to official regulations.

Product/Packaging disposal recommendations
Dispose in a safe manner in accordance with local/national regulations.

14. TRANSPORT INFORMATION

Department of Transportation (DOT)

In accordance with DOT
Not regulated

Transportation of Dangerous Goods

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

15. REGULATORY INFORMATION

US Federal regulations

No additional information available

International regulations

CANADA

EDTA4Na (13235-36-4)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

EDTA 4Na (13235-36-4)

Listed on the AICS (Australian Inventory of Chemical Substances) Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China) Listed on NZIoC (New Zealand Inventory of Chemicals) Listed on PICCS (Philippines Inventory of Chemicals and

Chemical Substances) Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

EDTA 4Na (13235-36-4)

Listed on the AICS (Australian Inventory of Chemical Substances) Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China) Listed on NZIoC (New Zealand Inventory of Chemicals) Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances) Listed on INSQ (Mexican National Inventory of Chemical Substances) Listed on the TCSI (Taiwan Chemical Substance Inventory)

US State regulations

Listed on TSCA (Toxic Substance Control Act)

16. OTHER INFORMATION

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