An ISO 9001: 2015 & GMP Certified Company 101, Aarkay Ruby Industrial Estate (1B), Opp Shree Narayan Industrial Estate, Chinchpada, Vasai East, Waliv, Maharashtra 401208. Tel: + 91 98200 41841

Email: info@ottokemi.com Web: www.ottokemi.com

MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1. Product identifiers

Product name: Ethylenediaminetetraacetic acid, GR 99%+

Product Code: E 1487 CAS No: 60-00-4

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

Use: Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet

Company identification OTTO CHEMIE PVT LTD

101, Aarkay Ruby Industrial Estate(1B), Opp Shree Narayan Industrial Estate,

Chinchpada, Vasai East, Waliv, Maharashtra 401208.

Email info@ottokemi.com

1.4. Emergency telephone number

Phone no.: + 91 22 2207 0099 (9:00am - 6:00 pm)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Acute toxicity, (Category 4) Specific target organ toxicity repeated exposure, (Category 2),

Respiratory Tract 2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram Signal Word

Hazard Statements

H332 H373

Precautionary Statements

P260 P271

P304 + P340 + P312

P314 P501

Supplemental Hazard

Statements

Reduced Labeling (<= 125 ml)

Pictogram

Signal Word Hazard Statements

none **Precautionary Statements** none Supplemental Hazard none

Statements 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.

Ecological information:

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.

Toxicological information:

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Otto Chemie Pvt Ltd - provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product

H332: Harmful if inhaled.

H373: May cause damage to organs through prolonged or repeated exposure if

inhaled.

Warning

Harmful if inhaled.

May cause damage to organs (Respiratory Tract) through prolonged or repeated exposure if inhaled.

Do not breathe dust.

Use only outdoors or in a well-ventilated area.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.

Get medical advice/ attention if you feel unwell.

Dispose of contents/ container to an approved waste disposal

plant. none

Warning



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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.

SECTION 3: Composition/information on ingredients

3.1 Substances

Formula : C10H14N2Na2O8 · 2H2O

Molecular weight : 372,24 g/mol CAS-No. : 6381-92-6 EC-No. : 205-358-3

Component	Classification	Concentration
Edetate disodium dihydrate		
CAS-No. 6381-92-6	Acute Tox. 4; STOT RE 2; H332, H373	<= 100 %
EC-No. 205-358-3		

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

Show this material safety data sheet to the doctor in attendance.

If inhaled

After inhalation: fresh air. Immediately call in physician. If breathing stops: immediately apply artificial respiration, if necessary also oxygen.

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: immediately make victim drink water (two glasses at most). Consult a physician.

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

Water Foam Carbon dioxide (CO2) Dry powder

Unsuitable extinguishing media

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

5.2 Special hazards arising from the substance or mixture

Carbon oxides

Nitrogen oxides (NOx)

Sodium oxides

Combustible.

Development of hazardous combustion gases or vapours possible in the event of fire.

5.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by

keeping a safe distance or by wearing suitable protective clothing.

5.4 Further information

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

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SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact.

Ensure adequate ventilation. 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

Advice on safe handling

Work under hood. Do not inhale substance/mixture.

Hygiene measures

Change contaminated clothing. Preventive skin protection recommended. Wash hands after working with substance.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Tightly closed. Dry.

Storage class

Storage class (TRGS 510): 11: Combustible Solids

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

Derived No Effect Level (DNEL)

Application Area	Routes of exposure	Health effect	Value
Worker DNEL, acute	inhalation	Local effects	3 mg/m3
Worker DNEL, longterm	inhalation	Local effects	1,5 mg/m3
Consumer DNEL, acute	inhalation	Local effects	1,2 mg/m3
Consumer DNEL, longterm	inhalation	Local effects	0,6 mg/m3
Consumer DNEL, longterm	oral	Systemic effects	

Predicted No Effect Concentration (PNEC)

Compartment	Value
Fresh water	2,2 mg/l
Sea water	0,22 mg/l
Aquatic intermittent release	1,2 mg/l
Sewage treatment plant	43 mg/l
Soil	0.72 mg/kg

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

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substances and under conditions deviating from those stated in EN 16523-1 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 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 EN 16523-1 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

Body Protection protective clothing Respiratory protection

Recommended Filter type: Combined particulates, inorganic and acidic gas/vapor, ammonia/amines and organic vapor type

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) Physical

b) Color c) Odor

d) Melting

point/freezing point

e) Initial boiling point and boiling range

f) Flammability (solid,

gas)

g) Upper/lower

flammability or explosive limits

h) Flash point

i) Autoignition

temperature

j) Decomposition temperature

k) pH

I) Viscosity

,

m) Water solubility

n) Partition coefficient:

n-octanol/water

o) Vapor pressure

p) Density Relative density

g) Relative vapor

density

r) Particle

characteristics

state crystals white

odorless

Melting point/range: 248 °C

No data available

No data available

No data available

Not applicable No data available

255 °C

No data available

Viscosity, kinematic: No data available

Viscosity, dynamic: No data available

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s) Explosive properties

t) Oxidizing properties

9.2 Other safety information

No data available

No data available none

SECTION 10: Stability and reactivity

10.1 Reactivity

The following applies in general to flammable organic substances and mixtures: in

correspondingly fine distribution, when whirled up a dust explosion potential may generally

be assumed.

10.2 Chemical stability

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

10.3 Possibility of hazardous reactions

Violent reactions possible with:

Strong oxidizing agents

10.4 Conditions to avoid

no information available

10.5 Incompatible materials

Aluminum, Copper, Copper alloys, Nickel, Zinc

10.6 Hazardous decomposition products

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Toxicity to Animals:

Oral LD50 Rat: 1500 mg/kg; Dermal LD50 Rabbit: 2000mg/kg

Inhalation LC50 Rat: > 50mg/L.

Chronic Effects on Humans: CARCINOGENIC EFFECTS: Classified None. by NTP, None. by OSHA, None. by NIOSH.

Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of inhalation (lung irritant).

Special Remarks on Toxicity

to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available. Special Remarks on other Toxic Effects on Humans: Not available.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish semi-static test LC50 - Oncorhynchus mykiss (rainbow trout) - > 100

mg/l - 96 h

(OECD Test Guideline 203)

Remarks: (ECHA)

The value is given in analogy to the following substances: Sodium

feredetate

Toxicity to daphnia and other aquatic

invertebrates

static test EC50 - Daphnia magna (Water flea) - 140 mg/l - 48 h

(DIN 38412) Remarks: (ECHA)

The value is given in analogy to the following substances:

Ethylenedinitrilotetraacetic acid disodium salt

NOEC - Daphnia magna (Water flea) - 25 mg/l - 21 d

Remarks: (ECHA)

The value is given in analogy to the following substances:

Ethylenedinitrilotetraacetic acid disodium salt

Toxicity to algae static test - Pseudokirchneriella subcapitata (green algae) - > 60

mg/l - 72 h

(OECD Test Guideline 201)

Remarks: (ECHA)

The value is given in analogy to the following substances: Sodium

feredetate

Toxicity to bacteria NOEC - activated sludge - > 640 mg/l - 3 h

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(OECD Test Guideline 209)

Remarks: (ECHA)

The value is given in analogy to the following substances: Sodium

feredetate

12.2 Persistence and degradability

Biodegradability Result: 2 % - Not readily biodegradable.

(OECD Test Guideline 301D)

Remarks: The value is given in analogy to the following substances:

Ethylenedinitrilotetraacetic acid disodium salt

12.3 Bioaccumulative potential

Bioaccumulation Lepomis macrochirus (Bluegill sunfish) - 28 d

at 21 °C - 0.08 mg/l(Edetate disodium dihydrate)

Bioconcentration factor (BCF): 1,8

(OECD Test Guideline 305)

Remarks: The value is given in analogy to the following substances:

Ethylenedinitrilotetraacetic acid, Tetrasodiumsalt

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 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.

12.7 Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

No data available

SECTION 14: Transport information

14.1 UN number

ADR/RID: - IATA: -

14.2 UN proper shipping name

ADR/RID : Not dangerous goods IMDG : Not dangerous goods IATA : Not dangerous goods

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 user

No data available

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.

Other regulations

Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or

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stricter national regulations where applicable.

Take note of Dir 94/33/EC on the protection of young people at work.

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has been carried out for this substance.

SECTION 16: Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

