

Safety Data Sheet

According to Regulation (EC) No. 1907/2006

Version 2 Date of issue 10.09.2018

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

1.1 Product identifier

Trade name: **Zeo fine**

1.2 Use of the substance/mixture:

Use of the substance/mixture: **Liquid for cleaning dishes and glasses**

1.3 Details of the supplier of the safety data sheet

ZEO TEC HELLAS GROUP IKE

SPARTIA AREA, SESKLO VOLOS

Tel. 2421095212

FAX: 2421095212

Postcode: 38500

E-MAIL : zthellagroup@gmail.com

1.4 Emergency telephone number

Emergency telephone number: **210 -7793777**

Section 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Skin corrosion (category 1B), H314

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

2.2 Label elements

According to Regulation (EC) No 1272/2008

Symbol



Signal word:

Danger

Hazard statements(recognized)

H314: Causes severe skin burns and eye injuries.

Precautionary Statement(s)

P102: Away from children.

P405: Keep it locked.

P280: Wear protective gloves/protective clothing/personal protective equipment for eyes/face.

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do not induce vomiting.

P303+P361+P353: In case of skin (or hair) contact: Take off immediately all contaminated clothes. Rinse the skin with water/have a shower.

P305+P351+P338: In case of eye contact: Rinse thoroughly with water for several minutes. If there are contact lenses, remove them, if it is possible. Keep rinsing.

P309 + P311: In case of exposure or illness: Call immediately Emergency telephone number or a doctor.

2.3 Other hazards

The substance/ mixture does not contain ingredients 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 Mixture

Ingredient(s)	CAS-No.	Number Reach	Classification according to 1272/2008/EC	Concentration (%)
Tetrasodium ethylenediamin tetraacetate	64-02-8	01-2119486762-27	Acute Tox. 4 (H302) Eye damage 1 (H318) Acute Tox. 4 (332)	15-30%
Sodium hydroxide	1310-73-2	01-2119457892-27	I Skin Corr. 1A (H314) Met. Corr. 1 (H290)	0-5%

For full text of the H AND EUH- phrases mentioned in this segment, see Section 16.

Section 4: First Aid Measures

4.1 Description of the first aid measures: General advice

Consult a doctor. Show this safety data sheet to the doctor in attendance.

In case of inhalation

In case of inhalation move to fresh air. If breathing is interrupted, apply artificial respiration. Consult a doctor.

In case of skin contact

Immediately remove contaminated clothes and shoes. Wash with soap and water. Consult a doctor.

In case of eye contact

Rinse with plenty of water for at least 15 minutes and consult a doctor.

In case of ingestion

Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a doctor.

4.2 Most important symptoms and effects, acute and subsequent

The most important known symptoms and effects are described in the label elements (see paragraph 2.2) and/or in section 11.

4.3 Indication of any immediate medical attention and special treatment needed

There are no elements.

Section 5: Firefighting measures

5.1 Firefighting equipment/ Appropriate firefighting equipment

Use water spray, mousse fixed in alcohol, dry extinguishing agent or carbon dioxide.

5.2 Specific hazards arising from the substance or mixture

Sodium oxide

5.3 Recommendations for firefighters

Do not try to combat fire without the appropriate protective equipment: Wear self-contained breathing apparatus.

5.4 Further Information

There are no elements

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Do not breathe fumes/mist/gas. Ensure adequate ventilation. Remove staff to a safe place.

For personal protective clothing see paragraph 8.

6.2 Environmental precautions

Prevent further leakage and dissipation, if it is possible without risk. Do not flush into surface water or sanitary sewer system. The depuration in environment must be avoided.

6.3 Methods and materials for restriction and cleaning

Collect with inert absorbent material and dispose it in dismissal as hazardous waste. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For rejection, see paragraph 13.

Section 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of fumes or fog.

For precautions, see 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep in a dry place. The container must be kept tightly closed in a place with good ventilation.

The open containers must be closed carefully and be stored upright, to avoid any oil leakage.

Sensitive to carbon dioxide

Category storage Germany (TRGS 510): non-flammable, corrosive hazardous materials

7.3 Specific end uses

A part of the uses mentioned in section 1.2. There are no other uses.

Section 8: Exposure controls/personal protection

8.1 Control Parameters

Components with workplace control parameters

SODIUM HYDROXIDE

VLA-EC: 2 mg/m³ (INSHT, Ισπανία)

TLV-STEL: 2 mg/m³ (ACGIH).

Prediction of individual exposure

Worker:

DNEL (local): 1 mg / m³ (inhalation toxicity)

General population:

DNEL (local): 1 mg / m³ (inhalation toxicity)

ETHYLENEDIAMINETETRAACETIC ACID, TETRASODIUM SALT

DNEL (Derived No Effect Level for Employees)

Long-term exposure - systemic and local effects, Inhalation: 2,5 mg / m³

worker:

Short-term exposure - systemic and local effects., Inhalation: 2.5 mg / m³

consumer:

Long-term exposure - systemic and local effects, Inhalation: 1,5 mg / m³

consumer:

Short-term exposure - systemic and local effects., Inhalation: 1,5 mg / m³

consumer:

Long-term exposure - systemic effects, oral: 25 mg / kg KG / day

PNEC (Derived No Effect Level)

fresh water: 2.2 mg / l

Production refers to free acid

seawater: 0,22 mg / l

Production refers to free acid

sporadic release: 1.2 mg / l

Production refers to free acid

soil: 0.72 mg / kg

Production refers to free acid

processing unit: 43 mg / l

Production refers to free acid

8.2 Exposure controls Appropriate engineering controls

The recommended protective measures for handling chemicals should be taken into account. Wash hands before breaks and at the end of work.

Personal protective equipment

Eye / face protection

Protective glasses that seal perfectly. Protective shield for the face. Use eye protection equipment tested and approved to the appropriate government standards, such as NIOSH (US) or EN 166 (EU).

Skin protection

Handle with gloves. The gloves should be examined before use. Use the correct glove removal technique (without touching the outer surface of the glove) to avoid skin contact with this product. Dispose of contaminated gloves after use, in accordance with applicable laws and good laboratory practice. Wash and dry hands

The protective gloves to be used must comply with the requirements of EU Directive 89/689 / EEC and the standard EN 374 resulting therefrom.

Full contact Material: Nitrile rubber Minimum layer thickness: Duration: 480 Minutes

Contact with droplets Material: Nitrile rubber Minimum layer thickness: Duration: 480 Minute

In case of use in solution or mixing with other substances and under deviations from those of EN 374, you should contact the supplier of EC approved gloves. This recommendation is only advisory and should be evaluated by the safety officer should be familiar with the specific circumstance that concerns the expected use by our customers

It should not be interpreted that approval is granted for each use case

Body Protection

Full protective clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the workplace.

Respiratory protection

When the risk assessment indicates that the use of respirators is appropriate, use a multi-purpose US respirator or spare ventilator filters of the ABEK type (EN 14387) as an alternative to the mechanical controls. If the ventilator is the only protection, use a full-ventilated respirator with an independent air supply. Use respirators and components tested and approved by state standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage and spillage if this is possible without risk. It is forbidden to enter into a sewer network. Elimination in the environment should be avoided

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

A)	View	liquid
B)	Odour	Characteristic
C)	Odour Threshold	There are no elements.
D)	PH	13,5 ± 0.5

E)	Melting/freezing point	There are no elements.
F)	Initial boiling point and boiling range	There are no elements.
G)	Flashpoint	Not applicable
H)	Evaporation Rate	There are no elements.
(i)	Flammability (solid, gas)	Not applicable
J)	Senior/ thresholds flammability or detonation	Not applicable
K)	Vapor pressure	There are no elements.
L)	Vapor Density	There are no elements.
M)	Relative density	There are no elements
N)	Water solubility	Full
O)	Partition coefficient: n-octanol/water	There are no elements.
P)	Temperature Spontaneous ignition	Not applicable
Q)	Temperature Decomposition	There are no elements.
R)	Viscosity	There are no elements.
S)	Explosive properties	Not applicable
T)	Oxidizing properties	Not applicable

9.2 Other information

There are no elements.

Section 10: Stability and reactivity

10.1 Reactivity

There are no elements.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

There are no elements.

10.4 Conditions to avoid

There are no elements.

10.5 Incompatible materials

Powerful oxidants

10.6 Hazardous decomposition products

Hazardous decomposition products – There are no elements. In case of fire: see section 5

Section 11: Toxicological information

11.1 Information on toxicological effects

SODIUM HYDROXIDE

11.2. acute effects (acute toxicity, irritation and corrosivity):

11.2.1. LD50 oral No test required (corrosion / irritation of the skin).
Effect: change of pH to assay system.

11.2.2. LD50 dermal No test required (Skin corrosion / irritation).
Effect: change of pH to assay system

11.2.3. LC50 sissehingamise I No test required (Skin corrosion / irritation).
Effect: change of pH to assay system

11.2.4. Skin corrosion / irritation Hazard category, 1A, H314: Causes severe skin burns and eye damage.

Corrosive (in vitro study)
(Equivalent OECD 435 method) (Stobbe et al., 2003)

11.2.5. Serious eye damage / irritation Hazard category, 1A, H314: Causes severe skin burns and eye damage. Corrosion (rabbit) (Morgan et al., 1987; Reer et al., 1976; Wentworth et al., 1993).

11.2.6 Specific Target Organ Toxicity - and only exposure
There is no information available.

11.3. sensitization:

Respiratory sensitization: No data available.

Skin sensitization: No test is required in case of strong acid (pH > 11.5).
Practical experience / in humans: there is no risk of sensitization (Park et al., 1995)

11.4. Repeated dose toxicity:

Specific target organ toxicity after repeated exposure: Caustic substance. It is not expected to be systematically available to the body. Regular handling and use. No specific target organ toxicity after repeated exposure.

11.5 CMR effects (carcinogenicity, mutagenicity and reprotoxicity):

Carcinogenicity: There are no experimental indications for carcinogenicity in vitro and in vivo (EU RAR, 2007). It is not expected to be systematically available to the body. Regular handling and use.

Genital cell mutagenicity: There are no experimental indications for mutagenicity in vitro and in vivo (EU RAR, 2007). It is not expected to be systematically available to the body. Regular handling and use.

Reproductive toxicity: Not expected to be systemically available in the body. Regular handling and use. No reproductive toxicity.

Reproductive toxicity - effects on lactation or lactation: Not expected to be systemically available in the body. Regular handling and use. No additional necessary information.

11.6. Aspiration hazard:

There is no information available.

Tetrasodium ethylenediaminetetraacetate

Acute toxicity

Estimation of Acute Toxicity:

Moderate toxicity after a single ingestion. Moderate toxicity after short-term breathe in.

Experimental data / calculation:

LD50 rat (oral): 1.780 - 2.000 mg / kg (BASF method)

LC50 rat (by inhalation):> 1 mg / l (other)

The product has not been tested. This statement has been derived from substances / products similar form or composition. An aerosol (aerosol) was tested.

LD50 (dermal):

There is no scientific justification for conducting a study.

Irritating effect

Estimation of irritant effects:

It is not irritating to the skin. It may cause serious damage to the eyes.

Experimental data / calculation:

Skin irritation / rabbit irritation: non-irritant (BASF Method)

Serious eye damage / rabbit irritation: Irreversible damage (BASF method)

Sensitization of respiratory tract / skin

Experimental data / calculation:

Guinea pig maximization test in guinea pig: Not sensitizing. (OECD Guideline 406). The product has not been tested. This statement has been derived from substances / products similar form or composition.

Stem cell mutagenesis

Assessment of mutagenicity:

In the majority of studies conducted (in bacteria / microorganisms / culture cells) no mutagenic effect was found. Also no mutagenic was observed effect on in-vivo tests.

Carcinogenic effect

Assessment of carcinogenicity:

In long-term studies with rats and mice in which the substance was administered with food, no carcinogenic effect was observed.

Reproductive toxicity

Estimation of reproductive toxicity:

Results from animal studies did not indicate an impairment of fertility.

Developmental Toxicity

Assessment of Teratogenicity:

Animal studies did not indicate an impairment of fertility, in doses were not toxic to the parent animals.

Toxicity to specific target organs (single exposure)

Simple estimate STOT:

Based on the available information, no specific toxicity is expected instruments after simple exposure.

Repeated dose toxicity and specific target organ toxicity
(repeated exposure)

Repeated dose toxicity assessment:

The substance can cause specific damage to organs after repeated her inhalation. The product has not been tested. This statement is derived from substances / products similar form or composition.

Danger of breathing

Not relevant

2-propenoic acid, homopolymer, sodium salt 9003-04-7

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity

LD50, Rat, > 5 000 mg / kg

Acute dermal toxicity

LD50, Rabbit, > 5 000 mg / kg

Acute inhalation toxicity

Product test data is not available

Skin erosion and irritation

light irritation

Severe ocular damage / ocular irritation

light irritation

Sensitization

It does not cause skin sensitization.

Specific Systemic Toxicity to Instruments Targets (Unique Report)

Product test data is not available.

Specific Systematic Toxicity to Instruments Targets (Repeated Exposure) Product testing data are not available.

Carcinogenicity

Product test data is not available.

Teratogenicity

Product test data is not available.

Reproductive toxicity

Product test data is not available.

Mutagenicity

Ames mutagenicity: Negative

Aspiration hazard

Product test data is not available

Section 12: Ecological information

It concerns the ingredients

SODIUM HYDROXIDE

12.1 Toxicity

Acute fish toxicity

LC50 35-189 mg / l.

Chronic toxicity to fish

NOEC Not used (substance in water decomposes).

Acute toxicity to crustaceans

EC50 Beings: Ceriodaphnia.
40.4 mg / l (48 hours, based on immobility)
(Warne et al., 1999)

Chronic toxicity in crustaceans

NOEC Not used (substance in water decomposes).

Acute toxicity to seaweed and other aquatic plants

EC50 Not available.

12.2. Persistence and degradability

Easily biodegradable Not used (inorganic substance).

12.3. Bioaccumulative potential

Experimental BCF Not used (High solubility in water)

Log Pow Not used (inorganic substance).

12.4. Mobility on the ground

High water solubility and mobility.

12.5. Results of the PBT and vPvB assessment

Perseverance (P):

The substance dissolves in water and quickly breaks down. This substance does not meet the classification criteria as Persistence.

Bioaccumulation (B):

Irrelevant. This substance does not meet the classification criteria as Bioaccumulation.

Toxic (T).

Minimum LC50 (drinking water) = 40 mg / L. Minimum LC50 (Marine) = 33 mg / L. These values are well above the 0.1 mg / L limit. This substance does not meet the classification criteria as toxic.

This substance does not meet the classification criteria as PBT or vPvB.

12.6 Other adverse effects

There is no information available

ETHYLENEDIAMINETETRAACETIC ACID, TETRASODIUM SALT

12.1. Toxicity

Assessment of aquatic toxicity:

There is a strong likelihood that the product does not have an acute toxic effect on aquatic organisms. No inhibition of the degradation capacity of the activated sludge is expected when introduced in biological treatment plants at fairly low concentrations.

Toxicity to fish:

LC50 (96 h) > 100 mg / l, *Lepomis macrochirus* (OPP 72-1 (EPA Directive), static)

Nominal concentration. The product has not been tested. This statement has been derived from substances/ products of similar form or composition.

Aquatic invertebrates:

EC50 (48 h) > 100 mg / l, *Daphnia magna* (DIN 38412 Part 11, static)

Nominal concentration. The product has not been tested. This statement has been derived from substances/ products of similar form or composition.

Aquatic plants:

EC50 (72 h) > 100 mg / l (growth rate), *Scenedesmus obliquus* (Directive 88/302 / EEC, Part C, p. 89, static)

Nominal concentration.

Micro-organisms / Effect on activated sludge:

EC20 (30 min) > 500 mg / l activated sludge of urban origin (OECD - Directive 209, aqueous)

Nominal concentration. No inhibition of its degradation potential is expected activated sludge when introduced into biological treatment plants at quite low levels concentrations. The product has not been tested. This statement is derived from substances / products similar form or composition.

Chronic toxicity to fish:

NOEC (35 d) > = 36.9 mg / l, *Brachydanio rerio* (OECD-Directive 210, dynamic flow)

Toxic effect data refer to analytically determined concentration. The product has not been tested. This statement has been derived from substances / products of a similar nature or composition.

Chronic toxicity to aquatic invertebrates:

NOEC (21 d) 25 mg / l, *Daphnia magna* (OECD 211, semi-static)

Nominal concentration. The product has not been tested. This statement has been derived from substances/ products of similar form or composition.

Organizations living on the ground:

LC50 (14d) 156 mg / kg, *Eisenia foetida* (OECD 207, artificial soil)

The product has not been tested. This statement has been derived from substances / products similar form or composition.

Ground Plants:

NOEC 84 mg / kg, soil plants (other)

The product has not been tested. This statement has been derived from substances / products similar form or composition.

Other non-mammalian terrestrials:

There is no scientific justification for conducting a study.

2-Propenoic acid, homopolymer, sodium salt 9003-04-7

12.1 Toxicity

Acute toxicity to fish

LC50, *Oncorhynchus mykiss* (rainbow trout), 96 h, 700 mg / l, OECD Test Guideline 203

LC50, *Lepomis macrochirus*, 96 h, > 1 000 mg / l, OECD Test Guideline 203

LC50, Fish Zebra (*Danio / Brachydanio rerio*), 96 h, > 200 mg / l, OECD Test Guideline 203

Acute toxicity to aquatic invertebrates

EC50, *Daphnia magna*, 48 h, > 1 000 mg / l, OECD TG 202

Acute toxicity to algae / aquatic plants

EC50, Fruit, 96 h, Growth rate, > 180 mg / l, OECD TG 201

12.2 Persistence and degradability

No data available.

12.3 Possibility of bioaccumulation

No data available.

12.4 Mobility on the ground

No data available.

12.5 Results of the PBT and vPvB assessment

The substance / mixture does not contain ingredients that are considered to be either PBT or highly persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

No data available.

Section 13: Disposal considerations

13.1 Waste management methods

Product

Residues and non-recyclable solutions are delivered to an approved waste treatment company.

Unpacked packages (packages)

Disposed of as unused product.

ANNEX

- 1) Disposal / Product
- 2) Disposal / Uncleaned packaging

20 01 29 * detergents containing dangerous substances

15 01 10 * packaging containing or contaminated by residues of dangerous substances

Section 14: Transport information
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14.1 UN Number

ADR/RID: IMDG IATA:

14.2 Proper shipping name

ADR/RID: ΚΑΥΣΤΙΚΟ ΑΛΚΑΛΙΚΟ ΥΓΡΟ, ΔΙΑΛΥΜΑ ΥΔΡΟΞΕΙΔΙΟΥ ΤΟΥ ΝΑΤΡΙΟΥ

IMDG: CAUSTIC ALKALI LIQUID SODIUM HYDROXIDE SOLUTION

IATA: CAUSTIC ALKALI LIQUID SODIUM HYDROXIDE SOLUTION

14.3 Transport hazard class

ADR/RID: 8 IMDG CODE: 8 IATA: 8

14.4 Packing Group

ADR/RID: II IMDG CODE: II IATA: II

14.5 Environmental hazards

ADR/RID: not IMDG Marine pollutant: no IATA: no

14.6 Special precautions for user

There are no elements

Section 15: Regulatory information

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

This Safety Data Sheet meets the requirements of Regulation (EC) 1907/2006 and CLP Regulation (EC) 1272/2008

According to the Detergent Regulation EC 648/2004: at least 15% but less than 30% EDTA Na less than 5%: polycarboxylates

Observe employment restrictions in accordance with the Workers Protection Act (94/33 / EC).

15.2 Chemical Safety Assessment

No data available

SECTION 16: Other information

Full text of H-Statements referred to in Section 3

H290 May corrode metals.

H302 Harmful if swallowed.

H318 Causes serious eye damage.

H332 Harmful if inhaled.

H314 Causes severe skin burns and eye damage.

Met. Corr. Corrosive metals

Skin Corr. Skin corrosion

Acute Tox. 4 (Inhalation - Dust)

Acute Tox. 4 (oral)

Eye Dam./Irrit. 1 Serious eye damage by 1

Further information

The above information is considered to be correct but does not include all data and should only be used as a guide. The information in this document is based on our current knowledge and does not constitute a guarantee for the product's properties.