Safety Data Sheet

According to REGULATION 1907/2006/EC Version 2 Date of issue 17 / 10 / 2018

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

1.1 **Product identifier** Trade name: **ZEO CLEAN**

1.2 Use of the substance / mixture Use of the substance/mixture: Cleaning fluid for various uses.

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 : <u>zthellasgroup@gmail.com</u>

1.4 Emergency telephone number

Emergency telephone number: 210 -7793777

Section 2: Hazards Identification

2.1 Classification of the substance or mixture

Eye irritation Cat. Eng. 2,H319

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

Pictogram



Signal word: Attention

Hazard statements(recognized) H

H319: Causes serious eye irritation.

Precautionary Statement(s)

P102: Away from children.

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. P301 + P310: IF SWALLOWED: Call immediately Emergency telephone number or a doctor

Other hazards

No other known dangers.

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) according to Regulation No 1907/2006 (EC), Annex XIII.

Section 3: Composition/information on ingredients

3.1 Mixtures

Hazardous ingredients

CAS No/EC	Ingredient	Number REACH	Classification according to 1272/2008/EC	Concentration
64-02-8	Ethylenediaminete traacetic acid, Tetrasodium salt	01-2119486762- 27	Acute toxicity, 4, H332 Skin irritation, 2, H315 Serious eye damage, 1, H318 Specific Target Organ Toxicity - Repeated Exposure, 2, Respiratory Tract, H373	0% - 5%
111905-53-4	Alkoxylated fat alcohol 4	02 2119552554-37	Skin Corr./Irrit. 2 Eye Dam. /Irrit. 2, H319, H315	0% - 5%
EC: 939-625-7	Alkane C6-C8 (even numbered), 1-sulphonic acid sodium salt	01-2119985168- 23-0000	Skin Corr./Irrit. 2 Eye Dam. /Irrit. 2, H319, H315	0% - 5%

Section 4: First aid measures

4.1 Description of first aid measures

If inhaled: Remove from exposure and lie down.

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 several minutes and keep your eyelids open.

If swallowed: Clean mouth with water and drink afterwards plenty of water.

4.2 Main symptoms and effects, acute and subsequent

Not available.

4.3 Indication of any immediate medical attention and special treatment needed Not available.

Section 5: Firefighting Measures

5.1 Firefighting equipment

Appropriate firefighting equipment.

Fire dust, mousse, sand, water spray.

5.2 Specific hazards arising from the substance or mixture

Nitrogen oxides (NOx), carbon monoxide (CO), sulfur dioxide (SO2) may be released in case of fire.

5.3 Recommendations for firefighters

Do not try to combat fire without the appropriate protective equipment:

Wear self-contained breathing apparatus. Remove all people from the incident.

Special protective equipment:

Wear protective extinguishing clothing (garments, helmets, footwear, gloves) according to the European Standard EN 469.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

The product, in contact with water, can form slippery mattresses.

There is high risk of slipping after spill or leakage.

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. If the product contaminates the environment, inform respective authorities.

6.3 Methods and materials for restriction and cleaning:

Stop leaking.

Dispose of contaminated materials according to the current regulations.

6.4 Reference to other sections

For information for safe handling, see section 7.

For information for personal protective equipment, see section 8.

Information for disposal, see section 13.

Section 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling: Keep containers tightly closed.

Advice on protection against fire and explosion:

No special measures are required.

7.2 Conditions for safe storage, including any incompatibilities

Storage:

Stored at temperatures below 30°C.

Compatible packaging materials: stainless steel, plastic.

Instructions on storing materials together: Keep separately from oxidizing substances.

Further statements about the storage conditions:

None

7.3 Specific end use(s):

Not available.

Additional instructions on configuring technical installations:

No other recommendations See. section 7.

Section 8: Exposure controls/personal protection

8.1 Control Parameters

Components with workplace control parameters:

ETHYLENEDIAMINETETRAACETIC ACID TETRASODIUM SALT

DNEL Core data source: IUCLID 5 datasheet: Derived derivative level for workers with acute local Respiratory exposure (mg / m3) / Derived No - Effect Derived Level workers with acute systemic respiratory exposure (mg / m3): 2.8; Derived derivative level for the general population with acute local / systemic respiratory exposure (mg / m3): 1.7; Derivative level without impact for the general population with long - term systemic oral exposure (mg / kg bw / day):28

PNEC Key data source: IUCLID 5 datasheet:

Predicted concentration without effects on fresh water (mg / l): 2.8; Predicted concentration without impact on sea water (mg / l): 0.28;

Anticipated concentration without impact in case of uninterrupted release (mg / l): 1.6;

Predicted Concentration without Impact at the Processing Plant Waste (mg / I): 57;

Predicted soil-free concentration (mg / kg): 0.95

Alkane C6-C8 (even numbered), 1-sulphonic acid, sodium salt

DNEL WORKERS Long term exposure - systemic effects, Inhalation : DNEL = 30,32 mg/m3 Long term exposure - systemic effects, Dermal : DNEL = 430 mg/Kg/day DNEL GENERAL POPULATION Long term exposure - systemic effects, Inhalation : DNEL = 7,48 mg/m3 Long term exposure - systemic effects, Dermal : DNEL = 2159 mg/Kg/day Long term exposure - systemic effects, Oral : DNEL : 2,15 mg/Kg/day PNEC WATER PNEC (freshwater) :0,1 mg/L PNEC (marine water): 0,01 mg/L PNEC (intermittent releases) : 1 mg/L PNEC SEDIMENT PNEC (freshwater) : 1,109 mg/Kg PNEC (marine water) : 0,1109 mg/Kg PNEC SOIL PNEC (soil): 0,163 mg/Kg PNEC SEWAGE TREATMENT PLANT PNEC (STP) : 31,3 mg/L

8.2 Exposure controls Personal protective equipment: General protection and hygiene measures:

When using it, do not eat, drink, smoke. Keep away from food, drink and animal feed. Immediately remove dirty, wet clothing. Wash hands before breaks and at the end of work. Avoid contact with skin. Avoid contact with eyes and skin.

Respiratory protection:

It is not necessary

Hand protection:

Protective gloves. The glove material should be impermeable and resistant to the product. Due to non-testing, no glove material can be proposed for the product.

Select the glove material taking into account transit times, permeability and degradation.

Glove material

Nitrile Rubber.

The choice of the suitable glove depends not only on the material, but also on the additional quality characteristics, which differ according to manufacturer EN 374

Penetration time of glove material

For mixtures of the chemicals listed below the migration time should be at least 480 minutes (Permeability according to EN 374). The exact passage time is given by the manufacturer of the protective gloves and should always be observed.

Eye protection:

Protective glasses fully fit.

Body protection:

Protective working clothes. Use protective clothing

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information				
Appearance: form:	Liquid			
Color:	Various			
Odour:	Characteristic			
Odour threshold:	-			
PH at 20 °C:	11± 0.5			
Melting point/liquidation limits:	>300 °C			
Boiling point/boiling limits:	>400 °C			
Flashpoint :	The substance does not ignite			
Decomposition Temperature:	Unusable .			
Risk of flammability	No risk of flammability.			
Explosion hazard of the product:	No explosion hazard.			
Explosion limits:				
Lower:	It does not exist.			
Upper:	It does not exist.			
Steam pressure:	Unusable			
Density at 20 °C:	1,02 g/cm³			
Relative density	Non-defined.			
Vapor Density	Unusable			
Evaporation Speed	Unusable			
Solubility in water at 20 °C	Full			
Distribution factor (n-octanol/H2O) to 23°C -				
Viscous capacity:				
Dynamic:	Unusable			
Kinematics:	Unusable			

9.2 Other information

There is no other relevant information.

10. Stability and reactivity

10.1 Reactivity
There are no elements.

10.2 Chemical stability
Thermal decomposition / conditions to avoid:
No decomposition if stored and applied as directed.
10.3 Possibility of hazardous reactions
None known.
10.4 Conditions to avoid
There is no other relevant information.
10.5 Incompatible materials:
There is no other relevant information

Section 11: Toxicological information

11.1 Information on toxicological effects

Ethoxylated alcohol 4

Acute toxicity Experimental data/ by calculation: LD50 rat (oral): > 2,000 mg/kg Irritating effects Experimental data/ by calculation: Skin irritation / rabbit: irritating (OECD - Directive 404) Eye damage / rabbit: irritating (OECD - Directive 405)

Ethylenediaminetetraacetic acid, Tetrasodium salt

Direct toxicity Oral LD-50 1780 mg/kg (No guidelines were followed.) Dermal LD-50 There are no data available Inhalation LC50 According to junction of information (ethylenediaminetetraacetic acid disodium salt): 1000< 4h-LC50 < 5000 mg/m3 (similar to: OECD 403) Irritation Skin: Non-irritating (OECD 404) Eye: Irritating to eyes (similar to: OECD 405) Respiratory system: Non-irritating (based on: acute inhalation test) (OECD 403) Sensitisation According to junction of information (ethylenediaminetetraacetic acid disodium salt): Sensitizing (OECD 406) Genotoxicity According to junction of information (hydroethylenediaminetriacetic acid of trisodium citrate): Ames test: Negative (OECD 471). Chromosome Aberration Test: Negative (OECD 473). Test Lymfoma of Mouse: Negative (OECD476).

Test micronucleus test on animals: Negative (OECD 474).

Chronic toxicity/carcinogenicity

Acute oral toxicity:

According to junction information (ethylenediaminetetraacetic acid disodium salt): 90-DAY: Non-noticed level of adverse effects: 500 mg/kg (general signs of toxicity – No guidelines were followed)

According to junction of information (hydroethylenediaminetriacetic acid of trisodium citrate): 104 – week: Non-noticed level of adverse effects: >= 500 mg/kg (No guidelines were followed.)

Acute inhalation toxicity:

According to junction of information (ethylenediaminetetraacetic acid disodium salt): 5-day: Lowest observable adverse effect concentration (LOAEC): 30 mg/m3 (respiratory tract pathology)

(OECD 412).

Reproduction toxicity:

According to junction of information (ethylenediaminetetraacetic acid, calcium disodium-complex):

Oral, NOAEL play: >= 250 mg/kg (No guidelines were followed).

According to junction of information (several EDTA compounds): developmental effects seen at high oral doses only. NOAEL development: not found (No guidelines were followed.) Neurotoxicity test: There is no specific information available.

Other toxicological information

Chronic toxicity (dermal): No data available.

Additional Information

The substance is extremely destructive to tissues of mucous membranes and the upper respiratory street, eyes and skin.

Alkane C6-C8 (even numbered), 1-sulphonic acid sodium salt

DL50: > 1550 mg/kg (rats) DL50: > 2000 mg/kg (rats) Initial irritation Skin: Irritating effects to skin and mucous membranes. Eye: Irritating. Sensitisation: No skin sensitisation (data available). Repeated dose toxicity NOAEL (oral/subchronic: rat): 430 mg/kg/jour target organs: liver

Section 12: Ecological INFORMATION

Ethoxylated alcohol 4

12.1. Toxicity Toxicity to fish LC50 (48 h) 1-10 mg / I, Leuciscus idus Aquatic invertebrates: EC50 (48 h) 1-10 mg / I LC1 1-10 mg / I Micro-organisms / Effect on activated sludge: EC10> 1,000 mg / I, activated sludge (DEV-L2) 12.2. Persistence and degradability Elimination information: > = 90% Active ingredient of bismuth (OECD amendment 301E) > 60% BOD of ThOD (28 d) (OECD Guideline 301 F) Easily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulation potential:

No accumulation in organisms should be expected.

12.4. Mobility on the ground

Assessment of transport risks between environmental compartments .:

The substance will not evaporate into the atmosphere from the surface of the water.

It is possible to adsorb the solid phase of the soil.

12.5. Results of the PBT and vPvB assessment

According to Annex XIV of Regulation (EC) No 1907/2006 on REACH Chemicals

(Registration, Evaluation, Authorization and Restriction of Chemicals): The product does not contain no substance meeting the PBT (persistent, bioaccumulative, toxic) or vPvB criteria (very persistent / very bioaccumulative). Self-classification

12.6. Other negative effects

The product does not contain substances referred to in Regulation (EC) 1005/2009 on substances that deplete the ozone layer.

12.7. Additional information

Cumulative factor

Chemical Oxygen Requirement (COD): 2.160 mg / g

Absorbable Organically Halogenated Compound (AOX):

This product does not contain organic bonded halogen.

Other ecotoxicological advice:

No inhibition of the degrading activity of the activated sludge should be expected in the correct introduction of small concentrations.

ETHYLENEDIAMINETETRAACETIC ACID, TETRASODIUM SALT

Ecotoxicological information

Ethylenediaminetetraacetic acid, tetrasodium salt: not dangerous to the environment.

PBT or vPvB: no.

Fish

According to information intersection (several EDTA compounds):

Lepomis macrochirus, 96-h-LC50> 1000 mg / I (no guideline was followed) According to an information intersection (Ethylenediaminetetraacetic acid, calcium-disodium

complex): Brachydanio rerio, 35-day Non-Observed Effect Concentration> = 25.7 mg / I (OECD 210)

Daphnia

According to an information intersection (Ethylenediaminetetraacetic acid, disodium salt): Daphnia magna, 48-h-EC50: 140 mg / I (DIN 38412, 11)

According to an information intersection (Ethylenediaminetetraacetic acid, disodium salt): Daphnia magna, 21-Day Non-Observed Incidence Concentration (SMW): 25 mg / I (Guideline: EEC XI / 681/86,

seaweed

According to an information junction (Ethylenediaminetetraacetic acid, ferric sodium complex): Desmodesmus subspicatus and Pseudokirchnerella subcapitata, 72-h-EC50> 300 mg / l (OECD 201)

bacteria

According to an information intersection (Ethylenediaminetetraacetic acid, disodium salt): 30-el. EC20> 500 mg / I (OECD 209)

PBT or vPvB no

Luck Abiotic Ablation Half-life: 20 days. is expected to be: resistant to hydrolysis. Decomposition Biotic Bioaccumulation Lepomis macrochirus, Flow through, 28-Day, 1 <Bioconcentration Factor (BCF) <2 (not followed Guideline)

Alkane C6-C8 (even numbered), 1-sulphonic acid, sodium salt

Toxicity Aquatic toxicity: fish, CL50:> 100 mg / I daphnia, CE50:> 100 mg / I algae, NOEC: 6.25 mg / I Resilience and degradation Other indications: The product readily dissolves biologically. Further ecological indications: General instructions: May not penetrate into groundwater, discharge into aquatic environment or drainage. Results of PBT and aAAB PBT assessment: Not applicable AAb: Not applicable Other negative effects No other relevant information is available.

Section 13: Disposal considerations

Disposal according to the European Waste and Hazardous Waste Directives waste. Waste codes must be set by the user as far as possible in consultation with waste disposal services.

13.1 Waste management methods

Product:

If recycling is not possible, the treatment is done according to local authority instructions. Disposal of waste occurs at approved waste disposal companies.

Uncleaned packaging:

Disposed of as unused product. Empty containers must be transported to an authorized licensed waste management organization for recycling or disposal. Do not use empty containers again. Run in accordance with state and European regulations.

Instructions for Choosing a Waste Code:

Wastes containing dangerous substances. If the product is further processed, the end user will need to redefine it and give it the most appropriate European Waste Catalog Code. It is an obligation of their creator waste to determine its toxicity and physical properties, identity and identity methods of disposal of waste generated, compliance with applicable EU Directives (EU Directive 2008/98 / EC) and local regulations.

Cleaning agent:

Water

Section 14: Transport information

The transport of the product in containers of the company is safe and does not require any additional precautions

14.1 UN Number ADR, ADN, IMDG, IATA 14.2 Proper shipping name ADR, ADN, IMDG, IATA 14.3 Transport hazard class ADR, ADN, IMDG, IATA Class 14.4 Packing Group ADR, IMDG, IATA 14.5 Environmental hazards: Environmentally dangerous: 14.6 Special precautions for user Unusable. -Unusable. -Unusable

Unusable

Not 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

Regulation (EE) 2015/830

CLP Regulation 1272/2008 / EC

REACH Regulation 1907/2006 / EC

Detergents Regulation 648/2004 / EC

Council Directive 98/24 / EC of 7 April 1998 on the protection of the health and safety of workers from the risks arising from the use of chemical agents

Directive 94/33 / EC on the protection of young people at work, as amended and in force. Directive 92/85 / EEC on the introduction of measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth, as amended and in force. Components according to the Detergents Regulation 648/2004 / EC

It contains among others less than 5% anionic nonionic surfactants and EDTA Na.

Contains preservative METHYLCHLOROISOTHIAZOLINONE, METHYLISOTHIAZOLINONE. May cause an allergic reaction.

15.2 Chemical Safety Assessment

A chemical safety assessment for the mixture has not been carried out

Section 16: Other information

Full text of the H and EUH phrases mentioned in Section 3

H373 May cause damage to organs after prolonged or repeated exposure
H332 Harmful if inhaled.
H319 Causes severe eye irritation.
H315 Causes skin irritation.
H318 Causes serious eye damage.
Skin Corr./Irrit. Skin erosion / irritation
Eye Dam./Irrit. Serious eye damage / irritation
Acute Tox. Acute toxicity

Footnotes and acronyms:

ADN - European Agreement concerning the International Carriage of Dangerous Goods through inland waterways; ADR - European Agreement on International Road Transport dangerous goods? AICS - Australian Index of Chemicals? ASTM -American Material Testing Company? bw - Body weight? CLP - Regulation Classification, Labeling and Packaging, Regulation (EC) 1272/2008; CMR -Carcinogenic, mutagenic or toxic for reproduction? DIN - Model of German Institute for Standardization? DSL - List of household substances (Canada); ECHA -European Chemicals Agency; EC-Number - European Community Number? ECx - Concentration associated with response x%? ELx - Rate of charge is associated with x% response? EmS - Emergency schedule? ENCS - Existing and new chemicals (Japan)? ErCx - Concentration associated with rate response increase x%; GHS - Global Harmonized System? GLP - Good laboratory practice? IARC - International Agency for Cancer Research; IATA - International Air Transport Association; IBC -International Code for the construction and equipment of ships carrying dangerous goods chemical bulk? IC50 - Half maximum inhibitory concentration; ICAO - International Organization Civil Aviation; IECSC - Directory of Existing Chemicals in China? IMDG -International Maritime Code of Dangerous Goods? IMO - International Maritime Organization; ISHL - Industrial Safety and Health Act (Japan); ISO - International Organization Standardization? KECI - Directory of Existing Chemicals in Korea? LC50 - Dead concentration in 50% of the test population? LD50 - Deadly dose in 50% of the population test (average lethal dose)? MARPOL - International Conference on Pollution Prevention from ships? n.o.s. - Not otherwise defined? NO (A) EC - Concentration in which no are (adverse) effects observed? NO (A) EL - Level at which they are not observed (adverse) effects? NOELR - Percentage of charge not observed effects? NZIoC - New Zealand Chemicals Index? OECD - Organization Economic Cooperation and Development? OPPTS - Chemical Safety Agency and Pollution Prevention? PBT - Persistent, Bioaccumulative and Toxic? PICCS -Philippines Chemical Index? (Q) SAR - (Quantitative) Structure-Activity Relationship? REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals products? RID - Regulations for international rail transport of dangerous goods goods; SADT - Temperature of self-accelerating decomposition; SDS - Bulletin Security Data? TCSI - Taiwan Chemical Index? TRGS - Technical Standard for dangerous substances? TSCA - Toxicity Control Act (United States); UN - United Nations; vPvB - Highly persistent and very bioaccumulative

The above information relates only to the specific product of our company based on our current level of knowledge and is not a guarantee of any specific product features This information may not apply to this product when used in conjunction with other materials or other activities, unless stated otherwise.