Safety Data Sheet

According to REGULATION 1907/2006/EC Version 2 Date 23/ 10 / 2018

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

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

1.2 Use of the substance / mixture Use of the substance/mixture: Liquid for cleaning bathrooms and WCs.

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 statement(s)(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 easy. Keep rinsing.

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

Additional Hazard Statements

2.3.Other hazards

No other dangers.

The product does not fulfill the criteria as PBT or vPvB according to the requirements of Regulation No 1907/2006 (EC), Annex XIII

Section 3: Composition/ information on ingredients

3.1 Mixtures

Hazardous ingredients

Cas No/EC	Component	REACH No	Classification according to 1272/2008/EC	Content
64-02-8	ethylenediaminetetr aacetic 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	Ethoxylated alcohol 4	02	Skin Irrit. 2 Eye	0% - 5%

		2119552554-37	Irrit. 2, H319, H315	
EC: 939-625-7	Alkane C6-C8 (even numbered), 1- sulphonic acid, sodium salt	01-2119985168-23	Skin Irrit. 2 Eye Irrit. 2, H319, H315	0% - 5%
61789-40–0	Cocoamidopropyl Betaine	01-2119513359-38	Eye Dam. 1, H318	0% - 5%

Section 4: First aid measures

4.1 Description of first aid measures

If inhaled: In case of inhalation, move to fresh air and put the patient at a constant lateral position.

In case of skin contact:

Immediately remove contaminated clothes and shoes. Wash with soap and water.

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.

4.3Indication 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

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 which must be monitored:

ETHYLENEDIAMINETETRAACETIC ACID TETRASODIUM SALT

DNEL Source of basic data: IUCLID 5 datasheet: Secondary level without consequences for workers with acute local respiratory exposure (mg/m3) / Secondary level without consequences for workers with acute systemic respiratory exposure (mg/m3): 2.8 Secondary level without consequences for the general population with acute local/systemic respiratory exposure (mg/m3): 1.7 Secondary level without consequences for the general population with Long-term systemic oral report (mg/kg bw/day): 28 PNEC Source of basic data: IUCLID 5 datasheet: Predicted concentration without effect on fresh water (mg/l): 2.8 Predicted concentration without effect on seawater (mg/l):0.28 Predicted concentration without effects in case of uninterrupted release (mg/l): 1.6 Predicted concentration without effects on processing factory waste (mg/l): 57 Predicted concentration without effects on soil (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 protective and sanitary measures:

During the use of the material, do not eat, drink, smoke. Keep away from food, drink and animal's food.

Remove immediately dirty, wet clothes. Wash hands before breaks and at the end of work. Avoid skin and eye contact.

Respiratory protection:

No respiratory protection is required.

Hand protection:

Wear protective gloves. The material of gloves must be impenetrable and resistant to the product.

Due to no realization of tests, no specific material of gloves for the product can be proposed. Choose the material of glove, taking into account the penetration time, the extent permeability and degradation.

Material of gloves

Rubber Nitril.

The choice of an appropriate glove depends not only on its material, but also on other quality features which differ from one manufacturer to another according to EN 374.

Breakthrough time of the material of gloves

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

Eye protection:

Absolutely tightly fitting safety goggles. **Skin and body protection**: Wear suitable 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) t	o 23°C -	
Viscous capacity:		

Dynamic: Unusable Unusable

9.2 Other information

There is no other relevant information

Section 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<

4- h-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

Cocoamidopropyl Betaine

11.1 Information on toxicological effects

Direct Danger Toxicity:

Important LD / LC50 classification

Oral LD50 2335 mg / kg (rat)

Skin LD50> 2000 mg / kg (rat)

Initial irritation:

on the skin:

Strong caustic effects on the skin and mucous membranes.

in the eye:

Strong caustic effects.

Intense irritation and serious eye damage.

Sensitization:

No sensitization is known.

Additional toxicological indications:

The product is presented according to the Calculation of EC Classification Guidelines for preparations, as in the latest version, the following risks:

Corrosive

Irritating

If swallowed, causes burns in the mouth and throat as well as the risk of perforation esophagus and stomach.

Toxicokinetics, metabolism and distribution

It is not classified.

Sensitization

It is not sensitizing.

Repeated dose toxicity

NOAEL (oral) of the active substance: 300 mg / kg bw / day

It is not classified.

CMR effects (carcinogenicity, mutagenicity and reproductive toxicity)

No known significant effect or critical hazard

Ethoxylated alcohol 4

12.1. Toxicity

Acute toxicity to fish:

LC50 (48 h) 1 - 10 mg/l, Leuciscus idus

Aquatic Invertebrates:

EC50 (48 h) 1 - 10 mg/l

LC0 1 - 10 mg/l

Microorganisms/influence on the activated sludge:

EC10 > 1,000 mg/l, activated sludge (DEV-L2)

12.2 Persistence and degradability

Information on eradication:

>= 90 % active ingredient bismuth (MOD. Oecd 301E)

> 60 % BOD of ThOD (28 d) (Directive OECD 301 F) easily biodegradable.

12.3 Bioaccumulative Potential

Bioaccumulative potential:

No bioaccumulation of organisms.

12.4. Mobility in soil

Risk assessment of distribution among environmental compartments.:

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

It is possible to be absorbed in solid phase of the soil.

12.5 Results of PBT and vPvB assessment

According to Annex XIV of Regulation (EU) No.1907/2006 for chemical substances, REACH (Registration, Evaluation, Authorisation and Acronym for of Chemicals): The product does not contain any substance which corresponds to the criteria PBT (persistent,

bioaccumulative, toxic) or vPvB (very persistent / very bioaccumulative). See classification. 12.6. Other negative effects

The product does not contain substances according to Regulation (EC) 1005/2009 that destroy the ozone layer.

12.7. Additional Information

Cumulative Factor

Chemical Oxygen Demand (COD): 2,160 mg/g

Absorbable organic bound halogen (AOX):

This product does not contain organic bound halogen.

Other eco-toxicological advice:

It should not be expected suspension of degradative action of activated sludge when there is correct import of small concentrations.

ETHYLENEDIAMINETETRAACETIC ACID TETRASODIUM SALT Eco-toxicological information

Ethylenediaminetetraacetic acid, Tetrasodium salt: not dangerous to the environment. PBT or vPvB: not **Fish** According to junction of information (several EDTA compounds): Lepomis macrochirus, 96- h-LC50 > 1000 mg/l (No guidelines were followed.) According to junction of information (ethylenediaminetetraacetic acid, calcium disodiumcomplex): Brachydanio rerio, 35-Day: Concentration of non-noticed level of effects (NOEC) >= 25.7 mg/I (OECD 210) Daphnia According to junction of information (ethylenediaminetetraacetic acid disodium salt): Daphnia magna, 48- h-EC50: 140 mg/l (DIN 38412, 11) According to junction of information (ethylenediaminetetraacetic acid disodium salt): Daphnia magna, 21-Day: Concentration of non-noticed level of effects (NOEC): 25 mg/l (Guideline: EEC XI/681/86, Draft: 4) Seaweed According to junction of information (ethylenediaminetetraacetic acid, complex ferrous sodium): Desmodesmus subspicatus and Pseudokirchnerella subcapitata, 72- h-EC50 > 300 mg/l (OECD 201) Bacteria According to junction of information (ethylenediaminetetraacetic acid disodium salt): 30-OJ 1976 EC20 > 500 mg/l (OECD 209) PBT or vPvB: Not Luck Abiotic Decomposition Time of halflife: 20 days. It is expected to be resistant to hydrolysis. **Biotic Decomposition** Bioaccumulation Lepomis macrochirus, flow through, 28-Day, 1< Factor of bioconcentration (BCF) <2 (No guidelines were followed.)

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

Toxicity Aquatic toxicity: fish, CL50:> 100 mg / l daphnia, CE50:> 100 mg / l Page 8 of 11 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 the PBT and $\alpha A \alpha B$ assessment PBT: Not applicable AAbB: Not applicable Other negative effects No other relevant information is available.

Cocoamidopropyl Betaine

12.1 Toxicity

Aquatic toxicity EC10 0.135 mg / I (freshwater fish) LC50 (static) 1,9 mg / I (freshwater invertebrates) 1.11 mg / I (freshwater fish). 12.2 Persistence and degradation Easily biodegradable according to OECD Guideline 301 B, OECD 301C, OECD

301 D and OECD 301F.

12.3 Possibility of bioaccumulation

Low.

12.4 Mobility on the ground

The substance is easily dissolved in water and is easily biodegradable. Further ecological indications:

General instructions:

Dangerous for the aquatic environment - Class 1 (our assessment): slightly hazardous May not penetrate into groundwater, discharge into aquatic environment or drainage undiluted or relatively in large quantities.

It is not allowed undiluted or ungrounded to be emptied into the wilderness, ie in cesspools. The escape of large quantities into a network of channels, drains or water resources can lead to an increase in pH.

Increased pH values damage aquatic organisms.

12.5 Results of the ABT and $\alpha A\alpha B$ assessment

PBT: Not classified

vPvB: Not classified

12.6 Other adverse effects

No other relevant information is available.

Section 13: Disposal considerations

Disposal is carried out in accordance with the European Waste and Hazardous Waste Directives waste. Waste codes must be set by the user as much as possible 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 approved container licensed waste management organization for recycling or disposal. Do not use them again empty containers. 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 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, in compliance with the applicable European

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	Unusable.
ADR, ADN, IMDG, IATA	- Llaussahla
14.2 Proper shipping name	Unusable.
ADR, ADN, IMDG, IATA	- 11
14.3 Transport hazard class	Unusable
ADR, ADN, IMDG, IATA	
Class	-
14.4 Packing Group	Unusable
ADR, IMDG, IATA	-
14.5 Environmental hazards:	NI - 4
Environmentally dangerous:	Not
14.6 Special precautions for user	Unusable

Section 15: Regulatory information

15.1 Safety, health and environmental regulations / legislation for the environment 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 health and safety of Workers from Risks Due to Chemical Factors Directive 94/33 / EC on the protection of young people at work, as amended and in force. Directive 92/85 / EEC on the implementation of measures to improve health and safety at work Safety at Work of Pregnant Workers, 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. It contains perfume, salicylate benzyl, limonene

15.2 Chemical Safety Assessment

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

Section 16: Other information

For full text of the R-, H- and EUH- phrases mentioned, see section 3.

H373: May cause damage to organs (state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)
H332: Harmful if inhaled
H319: Causes serious eye irritation.
H315: Causes skin irritation.
H318: Causes serious eye damage.
Skin Corr./Irrit. Skin Corrosion/Irritation
Eye Dam. /Irrit. Severe 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 only concerns 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 it is used in combination with other materials or other activities, unless stated otherwise