

Safety Data Sheet

According to Regulation (EC) No 1907/2006

Version 2

Date of issue 17/10/2018

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

1.1 Product identifier

Trade name: **ZEO TITANIUM**

1.2 Use of the substance / mixture

Use of the substance/mixture: **Multi-cleaning powerful liquid**

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 : zthellasgroup@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 1A), H314

Causes serious eye damage (category 1) H319

Classification corrosive is due to the pH of the product

For full text of R- phrases mentioned, see Section 16.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

Pictogram



Signal word: Danger

Hazards statement(s)(recognized)

H314: Causes serious skin burns and eye damage

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 clothing. Rinse 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 easy. 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 Mixtures

Ingredient(s)	CAS-No.	Number Reach	Classification according to 1272/2008/EC	Concentration
Alcohols, C12-13- branched ethoxylated (>5-<15EO)	160901-19-9	POLYMER	Acute Tox., 4 Eye Dam., 1 H302,318, H412	0% - 5%
Alkane C6-C8 (even numbered), 1-sulphonic acid sodium salt	EC: 939-625-7	01-2119985168-23-0000	Skin Corr./Irrit. 2 Eye Dam. /Irrit. 2, H319, H315	0% - 5 %
Ethylenediaminetetraacetic acid, Tetrasodium salt	64-02-8	01-2119486762-27	Acute toxicity, 4, H332 Skin irritation, 2,	0% -5%

			H315 Serious eye damage, 1, H318 Specific Target Organ Toxicity - Repeated Exposure, 2, Respiratory Tract, H373	
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For full text of H-, and EUH- phrases mentioned, see Section 16.

Section 4: First Aid Measures

4.1 Description of 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 section 2.2) and / or 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 spray water, mousse fixed in alcohol, dry extinguishing agent or carbon dioxide.

5.2 Specific hazards arising from the substance or mixture

There are no elements.

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.

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 section 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 section 13

Section 7: Handling and storage

7.1 Precautions for safe handling

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

For precautions, see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

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

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

7.3 Specific end use(s)

A part of the uses is 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

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

8.2 Exposure controls Engineering controls

When handling chemicals, recommended protective measures must be taken into account. Wash hands before breaks and at the end of work

Personal protective equipment

Eye protection / person

Tightly fitting safety goggles. Safety glasses with side-shields. Use tested and approved equipment for eye protection according to the appropriate standards of governments, such as NIOSH (USA) or EN 166 (EU).

Skin protection

Handle with gloves. Gloves must be examined before use. Use proper technique for removing the glove (without touching the outer surface of the glove) so as to avoid skin contact with this product. Discard the contaminated gloves after use, according to the valid legislation and the good laboratory practice. Wash and dry hands.

Gloves that are used, must comply with the requirements of EU Directives 89/689/EEC and the standard EN 374 resulting from this.

Full contact with the material: nitrile rubber Minimum Thickness layer: endurance time: 480 min

Contact with droplets of the material: nitrile rubber Minimum Thickness layer: endurance times: 480 min

In case of use in solution or mixture and in conditions which differ from those of the EN 374, you must contact your supplier of gloves that are approved by EC. This recommendation is only advisory and must be evaluated by the security manager who should be familiar with the specific circumstance that affects the expected usage from our customers.

Authorisation is not provided for each use.

Body protection

Full clothing protection from chemicals. The type of protective equipment must be selected according to the concentration and quantity of dangerous substances in the workplace.

Respiratory protection

When the risk assessment shows that it would be appropriate to use respirators, use full-face snorkeling with versatile combination (US) or replacement filters ventilator type ABEK (EN 14387) as an alternative of engineering controls. In case that the ventilator is the only protection, use full-face snorkeling with independent air flow. Use respirators and ingredients tested and approved by government standards, such as NIOSH (US) or CEN (EU).

Checking the environmental exposure

Prevent the 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

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

A)	View	Format: liquid
B)	Odour	Characteristic
C)	Odour Threshold	There are no elements.
D)	PH	12+- 0,5
E)	Melting/freezing point	There are no elements.
F)	Initial boiling point and boiling range	There are no elements.
G)	Flashpoint	Not self-igniting
H)	Evaporation Rate	There are no elements.
I)	Flammability (solid, gas)	Not self-igniting
J)	Senior/ thresholds flammability or detonation	There are no elements.
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	There are no elements.
Q)	Decomposition temperature	There are no elements.
R)	Viscosity	There are no elements.
S)	Explosive properties	Not applicable
T)	Oxidizing properties	Not applicable

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

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

Section 11: Toxicological information

11.1 Information on toxicological effects

ETHYLENEDIAMINETETRAACETIC ACID TETRASODIUM SALT

Acute 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)

Breathing: 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 Lymphoma of Mouse: Negative (OECD476).
Test micronucleus test on animals: Negative (OECD 474).

Chronic toxicity / carcinogenicity

Acute oral toxicity:

According to junction of 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

Sensitization: No skin sensitization (data available).

Repeated dose toxicity

NOAEL (oral/subchronic: rat): 430 mg/kg/jour target organs: liver

Alcohols, C12-13- branched and linear, ethoxylated

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity

LD50 rat:> 300 - 2,000 mg / kg Testing team results of our own tests / bibliographic values
Harmful if swallowed.

Acute inhalation toxicity

No data available

Acute dermal toxicity

LD50 rabbit:> 2,000 mg / kg; Examination Group (bibliographic importance) Based on the available data, the classification criteria are not met.

Skin erosion and irritation

Skin irritation

rabbit: non-irritating results of our own tests / bibliography values Examining Group Based on available data, the classification criteria are not met.

Severe damage / irritation of the eyes

Eye irritation

rabbit: Irreversible eye effects results of our own tests / bibliography values Group
Exposure Causes serious eye damage.

Testing group Test substance: Dilution, 10% Causes serious eye irritation.

Respiratory sensitization or sensitization of the skin

Sensitization

Experimental Maximization of the Guinea-pig: Non-sensitizing Examining Group (bibliographic significance)

Based on the available data, the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity in vitro

In-vitro experiments did not show mutagenic effects Testing team results of our own testing / bibliography values

Genotoxicity in vivo

In-vivo experiments did not show mutagenic effects Testing group (bibliographic significance)

Remarks

Based on the available data, the classification criteria are not met.

Carcinogenicity

The substance has been shown to be non-genotoxic and, therefore, not expected to have carcinogenic potential.

Examining team (bibliographic importance)

Remarks

Based on the available data, the classification criteria are not met.

Reproductive toxicity

No Reproduction Toxicity Testing Group (Bibliographic Importance)

Remarks

Based on the available data, the classification criteria are not met.

Teratogenicity

It did not have a teratogenic effect on animal experiments. Examining team (bibliographic importance)

Remarks-Teratogenesis

Based on the available data, the classification criteria are not met.

STOT-one-off report

Remarks

The substance or mixture is not classified as specific target organ toxicant, single exposure.

STOT-repeated exposure

Remarks

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Repeated dose toxicity

rat; Oral? 2 years NOAEL: 50 mg / kg (refers to body weight and day.) Instruments

Goals: Heart, Liver, Kidney Symptoms: decreased weight gain, weight increase

organs Examining team (bibliographic importance)

Suction toxicity

not applicable

Toxicological information

Toxicokinetic. Examination group The substance is expected to be absorbed and excreted at a rapid rate.

(bibliographic significance)

Section 12: Ecological information

12.1 Toxicity

ETHYLENEDIAMINETETRAACETIC ACID TETRASODIUM SALT

Ecotoxicological 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 disodium-complex):
Brachydanio rerio, 35-Day: Concentration of non-noticed level of effects (NOEC) \geq 25.7 mg/l (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: EC 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, $1 < \text{Factor bioconcentration factor (BCF)} < 2$ (No guidelines are followed.)

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

Fish, CL50: > 100 mg/l

Daphnia, CE50: > 100 mg/l

Alga, NOEC: 6,25 mg/l

Alcohols, C12-13- branched and linear, ethoxylated

12.1 Toxicity

Toxicity to fish - Chronic toxicity

EC10 *Pimephales promelas*: > 0,1 - 1 mg / l; mortality (bibliographical importance)

Toxicity to daphnia and other aquatic molluscs - Chronic toxicity

EC10 *Daphnia magna*: > 0,1 - 1 mg / l; Reproduction test? OECD TG 211; (bibliographic significance)

Toxicity to aquatic plants

EC50 (72 h) *Desmodesmus subspicatus* (green algae): > 1-10 mg / l; static test? OECD TG 201; results of our own tests / bibliography values Examining team

Toxicity to bacteria

EC50 activated sludge: 140 mg / l; Breathing Breath Testing Group (bibliographic importance)

Toxicity to soil organisms

NOEC *Eisenia foetida*: 220 mg / kg; playback rate? Artificial soil Testing group (bibliographical importance)

Toxicity to terrestrial plants

vegetation, growth? NOEC: 10 mg / kg; *Lepidium sativum* (cardamom); OECD TG 208 results of ours test / bibliography values Testing team

Toxicity to other land non-mammals

No data available

12.2 Persistence and degradability

Biodegradability

It is biologically degraded easily. > 60%; 28 d; aerobic? OECD TG 301 B results of our own test / bibliography values Testing team

12.3 Possibility of bioaccumulation

Bioaccumulation

Bioaccumulation is unlikely. (bibliographic significance)

12.4 Mobility on the ground

Motility

Absorption / Soil Koc: > 5000; QSAR (bibliographic significance)

12.5 Results of the PBT and vPvB assessment

Results of the PBT assessment

Based on the available data, the classification criteria are not met.

12.6 Other adverse effects

General suggestions

Alcohols, branched C12-13 and linear, ethoxylated (> = 2.5 EO): Harmful to aquatic organizations, with long-term effects

Section 13: Disposal considerations

Disposal is carried out in accordance with the European Waste and Hazardous Waste Directives waste. Waste codes must be specified by the user, as far as possible in consultation with them waste disposal services.

13.1 Waste management methods

Product:

If recycling is not possible, the treatment is done according to local authority instructions. OR disposal of waste is carried out in 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 the license again jars. 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 final one user should redefine and give it the most appropriate European Waste Catalog Code. It is an obligation of the creator of the waste to determine their toxicity and physical properties, identity and identity methods of disposal of waste generated, in compliance with the applicable European Directive 2008/98 / EC) and local regulations.

Cleaning agent:

Water.

Section 14: Transport information

14.1 UN number	Not applicable.
ADR, ADN, IMDG, IATA	-
14.2 UN proper shipping name	Not applicable.
ADR, ADN, IMDG, IATA	-
14.3 Transport hazard class (es)	Not applicable
ADR, ADN, IMDG, IATA	
Class	-
14.4 Packing group	Not applicable
ADR, IMDG, IATA	-
14.5 Environmental hazards:	
Environmentally Dangerous:	No.
14.6 Special precautions for user	Not applicable

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

Workers from Work From Risks Due to Chemical Factors

Directive 94/33 / EC on the protection of young people at work, as amended and in force. Directive

Directive 92/85 / EEC on the introduction of measures to improve health and safety at work

the work of pregnant workers, as has been 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.

15.2 Chemical Safety Assessment

No data available

Section 16: Other Information

For full text H-phrases mentioned, see section 3.

H314: Causes serious skin burns and eye injuries.

H319: Causes serious eye irritation.

H302: Harmful if swallowed.

H315: Causes skin irritation.

H318: Causes serious eye damage.

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

Skin Corr./Irrit. Skin Corrosion/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

Further information

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