



Safety Data Sheet

According to REGULATION 1272/2008/ EC
Version 1

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

1.1 Product identifier

Trade name: **ZEO INOX**

1.2 Use of the substance / mixture

Use of the substance/mixture: Cleaning liquid for stainless surfaces

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

166 Greece (National emergency center)
+30 210 7793777 (Emergency telephone number)

Section 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Eye irritation (Categorie 2)

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

Pictogram



Signal word: Caution

Hazard statements(recognized) H

H319: Causes severe eye irritation

Precautionary Statement(s)

P102: Away from children. .

P301 + P310: IF SWALLOWED: Call immediately POISON CENTER or a doctor.

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.

P337 + P313: If eye irritation does not subsist : Consult/visit a doctor.

2.3 Additional Hazard Statements

Other hazards

No other known hazards.

The product does not meet the criteria as PBT or vPvB in accordance with the requirements of Regulation No. 1907/2006 (EC), Annex XIII.

Section 3: Composition/information on ingredients

3.1 Mixtures

Hazardous ingredients

Cas No	Ingredient	REACH No	Sort according to 1272/2008/EC	Content
79-14-1	Glycolic acid	01-21194885579-17	Acute Tox. 4; H332 Skin Corr. 1B; H314	0-5%
137-16-6	sodium n-lauroylsarcosinate	01-2119527780-39	Acute Tox. 2; H330 Skin Irrit. 2; H315 Eye Dam. 1, H318	0-5%
56539-66-3	3-methoxy-3-methylbutan-1-ol	01-2119976333-33	H319	5-15%
69029-44-3	Polyoxyethylene glyceryl ether phosphate		Skin Irrit. 2; H315 Eye Dam. 1; H318	0-5%

4. FIRST AID MEASURES

4.1 Description of first aid measures

After inhalation:

In case of fainting it is necessary to lie down and transfer to a firm lateral position.

After skin contact:

Rinse immediately with water and soap and rinse thoroughly. Immediately remove contaminated clothing.

After eye contact:

Wash eyes with running water for a long time and with eyelids open.

After swallowing:

Rinse mouth and drink plenty of water.

4.2 Most important symptoms and effects, acute or delayed

Not available.

4.3 Indication of any immediate medical attention and special treatment required

Not available.

5. FIREFIGHTING MEASURES

5.1 Fire-extinguishing media

Suitable extinguishing media.

Fire-extinguishing powder, Foam, sand, Water spraying

5.2 Special hazards arising from the substance or mixture

In a fire, it is possible to release: oxides of nitrogen (NO_x), carbon monoxide (CO), dioxide Sulfur (SO₂)

5.3 Advice for firefighters

Do not attempt to fight the fire without proper protective equipment: Independent breathing appliances.

Remove all people from the incident.

Special protective equipment:

Wear protective fire-fighting clothing (garments, helmets, footwear, gloves) in harmony with the European Standard EN 469.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

The product in contact with water forms slippery layers. There is a great risk of slipping due to product spillage. Wear your individual Protective clothing.

6.2 Environmental precautions:

Obstruct the surface extension.

Do not empty into drains or the aquatic environment. In case of diverting into the aquatic environment or in the sewage system, notify the competent authorities.

6.3 Methods and materials for containment and cleaning up:

Stop leakage.

Dispose contaminated materials in accordance with current regulations

6.4 Reference to other sections

For safe handling see 7.

For personal protective equipment see 8.

For disposal information see 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Keep the container tightly closed.

Advice on how to protect against fire and explosion:

No special measures are required.

7.2 Conditions for safe storage, including any incompatibilities

Storage:

It is stored at temperatures below 30 ° C.

Compatible packaging materials: Stainless steel, plastic.

Storage: Keep separate from oxidizing substances.

Further statements on storage conditions:

none

7.3 Specific end use or uses

Not available.

Additional notes for the design of technical installations:

No other recommendation, see chapter 7.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Components with workplace exposure limit values to be monitored:

GLYCOLIC ACID

No Effect Level (DNEL)

Type	Report	Price	Population	Impact
DNEL	Long term Dermal	57,69 mg/kg bw/day	Workers	Systematic
DNEL	Long term Inhalation	9,2 mg/m ³	Workers	Systematic
DNEL	Long term Dermal	28,85 mg/kg bw/day	Consumers	Systematic
DNEL	Long term Inhalation	2,3 mg/m ³	Consumers	Systematic
DNEL	Long term Oral	0,75 mg/kg bw/day	Consumers	Systematic

Predicted concentration without effects (PNEC)

Section: Fresh water	Price: 0,0312 mg / l
Section: Sea water	Price: 0.0031 mg / l
Section: Intermittent use / release	Price: 0.312 mg / l
Section: Fresh water sediment	Price: 0.115 mg / kg
Section: Marine precipitate	Price: 0.0115 mg / kg
Section: Soil	Price: 0.007 mg / kg
Section: Sewage treatment plants	Price: 7 mg / l
Section: Oral (food chain)	Price: 16.66 mg / kg

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 your hands before and after the break. 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 impervious 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, permeation rates and degradation.

Glove material

Nitrile Rubber.

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

Penetration time of glove material

For mixtures of the chemicals listed below, the transit 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.

9. PHYSICAL AND CHEMICAL PROPERTIES**9.1 Data on basic physical and chemical properties****General information**

Appearance: Form:	thin liquid
Color:	various
Odor:	characteristic
Odor threshold:	-
PH at 20 ° C:	6.5 ± 0.5
Melting point / Melting range:	Undetermined.
Boiling point / boiling range:	Not determined.
Flash point:	Material does not ignite
Decomposition temperature:	Not applicable.
Self ignition risk	Not applicable
Risk of product explosion:	None
Explosion hazard limits:	
Inferior:	None.
Higher:	None.
Vapor pressure:	Not applicable
Density at 20 ° C:	1.02 g / cm ³
Relative density	Not defined.
Vapor density	Not applicable
Vaporization rate	Not applicable
Solubility in water at 20 ° C:	complete
Dispensing factor (n-Octanol / H ₂ O) at 23 ° C	-
Viscous property:	
Dynamic:	Not applicable
Kinematic:	Not applicable

9.2 Other information

No further relevant information available.

10. STABILITY AND REACTIVITY**10.1 Reactivity**

No data available on the potency of the product or its components.

10.2 Chemical stability

Thermal decomposition / Conditions to avoid:
It does not decompose if used properly.

10.3 Possibility of hazardous reactions

No dangerous reaction known.

10.4 Conditions to be avoided

No other relevant information is available.

10.5 Incompatible materials:

No other relevant information is available.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

GLYCOLIC ACID

Acute oral toxicity

LD50 / Rat: 2040 mg / kg
Method US EPA TG OPP 81-1

Acute inhalation toxicity

Acute toxicity estimate: 4.85 mg / l

Acute dermal toxicity

Acute toxicity / human assessment: > 5 000 mg / kg
Method: Expert judgment

Skin irritation

Rabbit

Classification: Corrosive

Result: Causes burns.

Method: OECD Test Guideline 404

Eye irritation

Rabbit

Classification: Causes serious burns.

Result: Corrosive

Method: OECD Test Guideline 405

Sensitization

Waterwind

Classification: Does not cause skin sensitization.

Result: Does not cause skin sensitization.

Method: OECD Test Guideline 406

Repeated dose toxicity

Oral NOAEL rat: 150 mg / kg

Method: OECD Test Guideline 408

Changes in organ weight, Effects on the kidneys

Assessment of mutagenicity

Experiments on animals showed no mutagenic effects.

Experiments on bacteria and mammalian cell cultures showed no mutational effect.

Assessment of carcinogenicity

Not classified as a carcinogen to humans. Experiments on animals have shown no carcinogenic effects

Evaluation of Reproductive Toxicity

No Reproductive Toxicity. Animal experiments did not show reproductive toxicity

Assessment of teratogenicity

Data suggest that the substance is not a developmental toxin for animals.

Carcinogenicity

Conclusion / Summary: No data available.

Toxicity to reproduction

Conclusion / Summary: No data available.

Teratogenic potential

Conclusion / Summary: No data available.

SODIUM N-LAUROYLSARCOSINATE

Acute Oral Toxicity: Oral LD50 (Rat, Male and Female):> 5.000 mg / kg

Method: OECD Test Guideline 401

GLP: yes

Acute inhalation toxicity: LC50 (Rat, male and female): 1 - 5 mg / l Exposure time: 4 h

Method: OECD Test Guideline 403 Test substance: 35%

GLP: yes

Remarks: Harmful when inhaled.

LC50 (Rat, male and female): 0.05 - 0.5 mg / l Exposure time: 4 h

Method: OECD Test Guideline 403

GLP: yes

Remarks: Toxic by inhalation.

Acute dermal toxicity: Remarks: Not applicable

Skin erosion and irritation

Species: Rabbit

Exposure time: 4 h

Assessment: No skin irritation

Method: OECD Test Guideline 404

Result: No skin irritation

GLP: yes

Test substance: 30%

Rating: Non-corrosive

Method: EPISKIN Human Skin Model Assay

Result: Non-corrosive

GLP: yes

Severe damage / irritation of the eyes

Species: Rabbit

Method: OECD Test Guideline 405

Result: irritant Test substance: 30%

Respiratory sensitizing or sensitizing the skin

Test Type: Maximization Experiment

Species: Waterbird

Assessment: Does not cause skin sensitization.

Method: Directive 67/548 / EEC, Annex V, B.6.

Result: Does not cause allergic sensitivity

GLP: yes

Test substance: 30%

Genital cell mutagenicity

In vitro genotoxicity:

Test type: in vitro test

Metabolic activation: with or without metabolic activation

Method: Mutagenesis (Salmonella typhimurium - reverse mutation assay)

Result: negative

GLP: yes

Test Type: Chromosome Deformation Test in Vitro

Species: Human lymphocytes

Metabolic activation: with or without metabolic Activation

Method: Directive 67/548 / EEC, Annex V, B.10.

Result: negative

GLP: yes

Test type: in vitro test

Metabolic activation: with or without metabolic Activation

Result: negative

GLP: yes

Carcinogenicity

No data available

Reproductive toxicity

Effects on fertility: Test substance: No data available

STOT-one-off report

Product:

Assessment:

No data available
Repeated dose toxicity
Species: Rat, male and female
NOAEL: 30 mg / kg
Method of Application: Oral
Exposure time: 90 days
Number of reports: 1x / day
Method: Directive 67/548 / EEC, Annex V, B.7.
GLP: yes

Suction toxicity
No data available

Further information
No data available

3-METHOXY-3-METHYLBUTAN-1-OLE

Acute toxicity
Not classified according to available information.

Acute oral toxicity: LD50 (Rat): 4.400 mg / kg

Acute dermal toxicity: LD50 (Rat):> 2,000 mg / kg
Assessment: This substance or mixture has no acute toxicity to the skin

Skin erosion and irritation
Not classified according to available information.
Species: Rabbit
Result: No skin irritation

Severe damage / irritation of the eyes
Causes serious eye irritation.
Species: Rabbit
Result: Eye irritation, reversed within 21 days

Respiratory sensitization or sensitization of the skin
Skin sensitization: Not classified according to available information.
Respiratory sensitization: Not classified according to available information.
Test Method: Maximization Experiment Exposure routes: Contact with skin
Species: Waterwind
Result: negative

Germ cell mutagenesis
Not classified according to available information.

Carcinogenicity
Not classified according to available information.

Reproductive toxicity
Not classified according to available information.
Effects on fertility:
Test Type: Reproduction / Test of Toxicity Test In development
Type: Rat
Method of Application: Ingestion
Method: OECD Test Guideline 421
Result: negative

Effects on fetal development:
Type of Test: Fetal development
Type: Rat
Method of Application: Ingestion
Result: negative

STOT-one-off report
Not classified according to available information.

STOT-repeated exposure
Not classified according to available information.

Repeated dose toxicity
Species: Rat, male
NOAEL: 60 mg / kg
LOAEL: 250 mg / kg
Method of Application: Ingestion
Exposure Time: 28 Days
Species: Rat, male
LOAEL: 0.53 mg / l
Method of Application: Inhalation (steam) Exposure Time: 28 Days

Suction toxicity
Not classified on the basis of available information.

POLYOXYETHYLENE GLYCERYL ETHER PHOSPHATE

Acute toxicity
Acute Oral Toxicity: Remarks: Low Acute Toxicity.
The information given is based on data, which are derived from the individual components and the toxicology of similar products.

Skin erosion and irritation:
Result: irritant
Remarks: The information given is based on data derived from the individual components and the toxicology of similar products.

Serious eye damage / eye irritation:
Assessment: Risk of serious eye damage.
Remarks: The information given is based on data derived from the individual components and the toxicology of similar products.

Respiratory sensitization or sensitization of the skin
Remarks: No data available

Genital cell mutagenicity
In vitro genotoxicity: Remarks: No data available

Carcinogenicity:
Remarks: This information does not exist.
Reproductive toxicity Product:
Effects on fertility:
Remarks: This information does not exist.

STOT-one-off report:
Assessment: No data available
Repeated dose toxicity:
Remarks: This information does not exist.

Suction toxicity:
No data available

Further information:
Remarks: The information given is based on data derived from the individual components and the toxicology of similar products.

12. ECOLOGICAL INFORMATION

GLYCOLIC ACID

12.1. Toxicity

Toxicity to fish

LC50 / 96 h / *Pimephales promelas* (carp): 164 mg / l

Toxicity to aquatic plants

ErC50 / 72 h / *Pseudokirchneriella subcapitata* (green algae): 44 mg / l

Method: OECD TG 201

NOEC / 72 h / *Pseudokirchneriella subcapitata* (green algae): 20 mg / l

Method: OECD TG 201

Toxicity to aquatic invertebrates

EC50 / 48 h / *Daphnia magna*: 141 mg / l

Method: OECD TG 202

12.2. Persistence and degradability

Biodegradable

12.3. Bioaccumulative potential

There is no evidence

12.4 Soil mobility

There is no evidence

12.5. Results of the PBT and vPvB assessment

Assessment of PBT and vPvB

Unregistered PBT / unidentified vPvB

12.6. Other negative impacts

There is no evidence

SODIUM N-LAUROYLSARCOSINATE

12.1 Toxicity

Toxicity to fish: LC50 (*Danio rerio* (Zebrafish)): 107 mg / l

Exposure time: 96 h Testing type: semi-static test Test substance: 30%

Method: OECD Test Guideline 203 GLP: yes

Toxicity to daphnia and: EC50 (*Daphnia magna*): 29,7 mg / l

Other aquatic molluscs Exposure time: 48 h

Test type: static test Test substance: 30%

Method: OECD TG 202 GLP: yes

Toxicity to seaweed: ErC50 (*Desmodesmus subspicatus*): 79 mg / l

Exposure time: 72 h Testing type: static test Test substance: 30%

Method: OECD TG 201 GLP: yes

EbC50 (*Desmodesmus subspicatus*): 39 mg / l Exposure time: 72 h

Testing type: static test Test substance: 30% Method: OECD TG 201 GLP: yes

12.2 Persistence and degradability

Biodegradability: Test Type: ISO 14593

Result: It is readily biodegradable. Biodegradation: 82%

Exposure time: 28 d

Method: Directive 67/548 / EEC, Annex V, C.4.B. GLP: yes

12.3 Possibility of bioaccumulation

Bioaccumulation: Remarks: Bioaccumulation is not expected ($\log Pow \leq 4$).

Partition coefficient: n-octanol / water: $\log Pow$: estimated at 0.37

12.4 Mobility on the ground

No data available

12.5 Results of PBT and vPvB assessment

Assessment: The substance / mixture does not contain any constituents considered That they are either PBT or highly persistent and very bioaccumulative (vPvB) at levels of 0,1% or higher.

12.6 Other adverse effects
No data available

3-METHOXY-3-METHYLBUTAN-1-OLE

12.1 Toxicity

Toxicity to fish: LC50 (*Oryzias latipes* (Japanese medaka)): > 100 mg / l Exposure time: 96 h
Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic molluscs: EC50 (*Daphnia magna*): > 1,000 mg / l
Exposure time: 48 h
Toxicity to seaweed: NOEC (*Selenastrum capricornutum* (green algae)): 1,000 mg / l
Exposure time: 72 h
ErC50 (*Selenastrum capricornutum* (green algae)): > 1,000 mg / l
Exposure time: 72 h
Toxicity to bacteria: EC50: > 1,000 mg / l
Exposure time: 3 h
Toxicity to daphnia and other aquatic molluscs (Chronic toxicity):
NOEC: 100 mg / l Exposure time: 21 d
Species: *Daphnia magna* Method: OECD TG 211

12.2 Persistence and degradability

Biodegradability:
Result: Biodegradation is difficult. Biodegradation: 78.9%
Exposure time: 28 d
Method: OECD Test Guideline 310
Result: It is biodegradable by itself.
Biodegradation: 100% Exposure time: 28 d Method: OECD TG 301 C

12.3 Possibility of bioaccumulation

Partition coefficient: n-octanol / water: log Pow: 0.18

12.4 Mobility on the ground

No data available

12.5 Results of PBT and vPvB assessment

No matter what

12.6 Other adverse effects

No data available

POLYOXYETHYLENE GLYCERYL ETHER PHOSPHATE

12.1 Toxicity Product:

Toxicity to fish: Remarks: No data available

12.2 Persistence and degradability:

Biodegradability: Remarks: Immediately biodegradable

12.3 Possibility of bioaccumulation

Remarks: No data available

12.4 Mobility on the ground

Remarks: No data available

12.5 Results of 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

13. DISPOSAL CONSIDERATIONS**13.1 Waste management methods**

Recommendation:

It must not be deposited with common waste. Do not empty into drains.

Uncleaned packaging:

Recommendation:

Disposal should be in accordance with official regulations.

Cleaning agent: Water.

14. TRANSPORT INFORMATION

The transport of the product is safe in the company's containers and no additional precautions are required.

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

15. REGULATORY INFORMATION**15.1 Safety, health and environmental regulations / legislation specific for the substance or mixture**

Components according to the Detergents Regulation 648/2004 / EC

Contains at least 5% but less than 15% anionic surfactants and less than 5% non-ionic surfactants, EDTA Na and soaps. Contains preservative METHYLCHLOROISOTHIAZOLINONE, METHYLISOTHIAZOLINONE and fragrance

15.2 Chemical Safety Assessment

No chemical safety assessment for the mixture has been carried out

16. OTHER INFORMATION**List of the hazard statements referred to in section 3 (H-phrases):**

H314	Causes severe skin burns and eye damages
H315	Causes skin irritation

H318 Causes serious eye damage.
H319 Causes serious eye irritation

Skin/Eye cor. Skin,eye corrosion
Skin/Eye irrit. Skin,eye irritation

Footnotes and acronyms:

DNEL - Derived No Effect Level
EUH - CLP Special Risk Statement
ABT - Persistent, Bioaccumulative and Toxic
PNEC - Predicted Concentration No Impact
REACH number - REACH registration number
VPvB - highly persistent and very bioaccumulative

The above information only pertains to the specific product of our company based on our current level of knowledge and is not a guarantee of any specific product features.