# **Safety Data Sheet**

According to Regulation (EC) No 1907/2006 Version 2 Date of issue 19/10/2018

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

#### 1.1 Product identifier

Trade name: ZEO ULTRA BISCUIT

#### 1.2 Use of the substance /mixture

Use of the substance/mixture: Liquid for cleaning floors and other 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

Emergency telephone number: 210 -7793777

#### **Section 2: Hazards Identification**

## 2.1 Classification of the substance or mixture

Causes serious eye irritation Cat. 2, H319

# 2.2 Label elements

According to Regulation (EC) No 1272/2008 [CLP]

## **Pictogram**



Signal word: Attention

#### Hazard statement(s) (recognized) H

H319 Causes serious eye irritation

#### **Precautionary Statement(s)**

P102 Keep out of reach of children

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor/...

## **Additional Hazard Statements**

#### 2.3 Other hazards

No other dangers.

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/Substances

#### **Dangerous substances**

CAS-No	Ingredient(s)	Number REACH	Classification according to 1272/2008/EC	Concentration
111905-53-4	Ethoxylated alcohol 4	02 2119552554- 37	Skin Corr./Irrit. 2 Eye Dam./Irrit. 2, H319, H315	0% - 5%
107-98-2	1-methoxy-propan-2-ol	01- 2119457435- 35	Flam. Liq., 3, H226 STOT SE, 3, H336	0% - 5%
33939-64-9 9002-92-0	Reaction mixture of alkylether carboxylic acid and ethoxylated fatty alcohol		Eye Dam. 1, H318	0% - 5%

## **Section 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 very well. 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, either acute or delayed** Not available.

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

#### **Section 5: Firefighting Measures**

## 5.1 Fire-extinguishing media

## Suitable extinguishing media.

Fire extinguishing powder, Foam, sand, Water spray

#### 5.2 Special hazards arising from the substance or mixture

In a fire, it is possible to release: nitrogen oxides (NOx), carbon monoxide (CO), sulfur dioxide (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 accordance with 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 may form slippery layers.

There is a great risk of slipping due to product spillage.

## 6.2 Environmental precautions:

Prevent its surface expansion.

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

# Section 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.

Advice on storage: Keep separate from oxidising 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.

Section 8: Exposure controls/personal protection

#### 8.1 Control parameters

## Components with limit values related to workplaces and to be monitored:

No data available

#### 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

<u>Γενικές πληροφορίες</u> Appearance: Form: colour: Odour	<b>Thin liquid</b> various characteristic	
Odour threshold:	-	
pH σε 20 °C:	7 ± 0,5	

Melting point/range:	>300 °C	
Boiling point/boiling range:	>400 °C	
Flash point:	The material does not ignite	
Decomposition temperature:	Not applicable	
Risk of self-ignition	Not available	
Explosion hazard limits		
inferior:	NONE	
Higher :	NONE	
Vapour pressure:	Not applicable	
Density at 20 °C:	1,02 g/cm³	
Relative density	Not defined	
Vapor density	Not applicable	
Vaporization rate	Not applicable	
Solubility in water at 20 °C:	complete	
Distribution coefficient (n-Octanol/H2O) σε 23 °C -		
Viscous property		
Dynamic:	Not applicable	
Kinematic:	Not applicable	

#### 9.2 Other information No data

# Section 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

# Section 11: Toxicological information

# 11.1 Information on toxicological effects

## It concerns the alcohol fatty alcohol 4

Acute toxicity

Experimental data / calculation:

LD50 rat (oral):> 2,000 mg / kg

Irritating effect

Experimental data / calculation:

Skin irritation / irritation rabbit: Irritant. (OECD - Directive 404)

Serious eye damage / rabbit irritation: Irritant. (OECD - Directive 405)

#### It concerns the 1-methoxy-propanol-2

**Acute Toxicity** 

Ingestion

Toxicity is considered to be low in a single oral dose. Ingestion of small quantities in accordance with normal handling operations is unlikely to cause damage. Swallowing larger quantities of these may cause damage.

LD50, rat 4.016 mg / kg

#### Risk of aspiration

Based on physical properties, it is not expected to be a risk of aspiration.

#### Skin

Prolonged exposure is unlikely to result in the absorption of harmful amounts of the substance from the skin.

LD50, rabbit> 2,000 mg / kg

#### Breathe in

The short exposure (minutes) is not expected to cause side effects. Odor is annoying at 100 ppm. Higher levels cause irritation to the eyes, nose and throat and are tolerated at 1,000 ppm. Anesthetic effects occur at or above 1,000 ppm.

LC50, 6 h, Steam, rat> 25.8 mg / I

# Severe damage / irritation of the eyes

May cause mild transient (temporary) irritation to the eyes. Corneal damage is unlikely.

#### Skin erosion / irritation

Prolonged contact may cause mild irritation to the skin with local redness. Repeated contact may cause slight irritation to the skin, with local redness.

## **Sensitized Skin**

It did not cause allergic reactions to the skin when guinea pig experiments were performed.

#### Respiratory

No relevant data found.

# Repeated dose toxicity

Symptoms from repeated exposure may include complications from anesthetic or narcotic effects. Dizziness and drunkenness may occur. Animals have reported effects on the following organs: Kidney. Liver.

## **Chronic Toxicity and Carcinogenicity**

It did not cause cancer in experimental animals.

## **Developmental toxicity**

It was toxic to the fetus of experimental animals at doses toxic to the mother. It did not cause genetic deformities in experimental animals.

#### Reproductive toxicity

In studies in experimental animals, effects on reproduction have only been observed at doses which produced significant parental-animal toxicity.

## **Genetic Toxicology**

In vitro genetic toxicity studies were negative. The results of mutagenesis tests in animals were negative.

# It concerns the Reaction mixture of alkylether carboxylic acid, sodium salt and ethoxylated fatty alcohol

11.Information on toxicological effects

#### Acute toxicity

Result	Kind	Dose
LD50 oral LD50 oral	Rat	>2000 mg/kg
	Rat	
		300 to 2000 mg/ kg

**Conclusion / Summary**: No known significant effects or critical hazards.

## **Irritation / Corrosion**

Conclusion / Summary

Skin: Not irritating to skin. (Data for a similar product) (CESIO)

Eyes: Causes serious eye damage. (OECD 405 Acute Eye Irritation / Corrosion)

Respiratory: No known significant effects or critical hazards.

#### Sensitive substance

Conclusion / Summary

Skin: It does not cause sensitization (Read across)

Respiratory: No known significant effects or critical hazards.

## Mutuality

Test	Expirement	Result
OECD 471 Bacterial Reverse Mutation test	Object: Bacteria	Negative

Conclusion / Summary: It was not mutagenic in the Ames test.

## Carcinogenicity

Conclusion / Summary: No known significant effects or critical hazards.

## **Reproductive toxicity**

Conclusion / Summary: No known significant effects or critical hazards.

## **Teratogenic potential**

Conclusion / Summary: No known significant effects or critical hazards.

STOT-one-off report

STOT-repeated exposure

#### Potential acute effects on health

Inhalation: May produce gases, vapors or dust that are very irritating or corrosive to the

respiratory system.

Ingestion: May cause burns in the mouth, throat and stomach. Skin contact: No known significant effects or critical hazards.

Eye contact: Causes serious eye damage.

## Symptoms related to physical, chemical and toxicological characteristics

Inhalation: No specific data available.

Ingestion: Harmful symptoms may include the following: stomach pains
Skin contact: Harmful symptoms may include the following: pain or irritation

blushing

blistering may occur

Eye contact: Harmful symptoms may include the following:

pain tear reddening

#### Potential chronic health effects

Conclusion / Summary: No data available.

General: No known significant effects or critical hazards.

Carcinogenicity: No known significant effects or critical hazards. Mutagenicity: No known significant effects or critical hazards.

Teratogenicity potential: No known significant effects or critical hazards. Effects on development: No known significant effects or critical hazards.

Effects on fertility: No known significant effects or critical hazards.

Absorption: No data available. Distribution: No data available. Metabolism: No data available. Elimination: No data available.

Other information: No data available.

### Section 12: Ecological information

# It concerns the ingredient Ethoxylated alcohol 4

12.1. Toxicity

Toxicity to fish:

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

Aquatic invertebrates:

EC50 (48 h) 1-10 mg / l

LC1 1-10 mg / I

Micro-organisms / Effect on activated sludge:

EC10> 1,000 mg / l, 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 Demand (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

## It concerns the ingredient 1-methoxy-propan-2-ol

#### 12.1 Toxicity

Material not classified as dangerous to aquatic organisms (LC50 / EC50 / IC50 levels are greater than 100 mg / I in the most sensitive organisms).

#### Acute and long-term toxicity to fish

LC50, Leuciscus idus, static test, 96 h: 6.812 mg / l

LC50, Oncorhynchus mykiss, semi-static test, 96 h:> = 1,000 mg / I LC50, Pimephales promelas, static test 96 h: 20,800 mg / I Acute toxicity to aquatic invertebrates LC50, Daphnia magna, static test, 48 h, immobilization: 21,100 - 25,900 mg / I

## **Toxicity to aquatic plants**

ErC50, Pseudokirchneriella subcapitata (green algae), static test, Growth rate inhibition, 7 d:> 1,000 mg / l

#### 12.2 Durability & Degradation

The substance is readily biodegradable. Successfully passes the OECD test for easy biodegradation.

OECD biodegradation tests:

96%

Biodegradation	Exposure time	Method	Approximately 10 days

OECD 301D

acceptance test

## 12.3 Possibility of bioaccumulation

28 d

**Bioaccumulation**: Bioconcentration probability is limited (BCF <100 or Pow <3).

Partition coefficient n-octanol / water (log Pow): 0.37 Measured

## 12.4 Mobility on the ground

Mobility on the ground: The probability of mobility in the soil is particularly high (Koc between 0 and 50).

Organic Soil / Water Coefficient (Koc): 0.2 - 1.0 Estimated. Henry's law (H): 1.40E-06 atm \* m3 / mole Estimated by vapor pressure and water solubility.

## 12.5 Results of the PBT and vPvB assessment

This substance is not considered persistent, bioaccumulative and toxic (PBT). This substance is not considered highly persistent and very bioaccumulative (vPvB).

#### 12.6 Other adverse effects

This substance is not included in Annex I to Regulation (EC) No 2037/2000 on substances that deplete the ozone layer

Surfactants comply with biodegradability criteria are laid down in Regulation (EC) No 648/2004 on detergents. The data that support this statement are at the disposal of their competent authorities Member States and will be provided to them at their direct request or at the request of the detergent manufacturer.

# It concerns the ingredient reaction mixture of alkylether carboxylic acid, sodium salt and ethoxylated fatty alcohol

## 12.1 Toxicity

Result	Kind	Exposure	Test
Acute EC50 16 mg/l	Daphne	24 hours	-
Acute EC50 8,1 mg/l Acute LC50 5,7 mg/l		48 hours 96 hours	-

# 12.2 Persistence and degradability

Test	Result	

Duration of half life in water	Photolysis	Biodegradability
-		immediately
-	-	immediately
EPA Test Guideline CG-2050		63 % - 60 days
OECD 301D Ready Biodegradability - Closed Bottle Test		>60 % - immediately - 28 days

Conclusion / Summary: Anaerobic Biodegradable

## 12.3 Possibility of bioaccumulation

## 12.4 Mobility on the ground

Dispersing factor: No data available.

Soil / Water (KOC)

Mobility: No data available.

## 12.5 Results of PBT and vPvB assessment PBT:

No.

**12.6 Other adverse effects**: No known significant effects or critical hazards.

# 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 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

the responsibility of the creator of the 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 is safe in the company's containers and does not require additional precautions.

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 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 and nonionic surfactants.

Contains preservative METHYLCHLOROISOTHIAZOLINONE, METHYLISOTHIAZOLINONE, fragrance

## 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 R, H and EUH phrases mentioned in Section 3

H319 Causes serious eye irritation H226 Flammable liquid and vapour H336 May cause drowsiness or dizziness 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 goodschemical 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 substance

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.