SAFETY DATA SHEET

according to Reg. (EC) No 1907/2006 modified by Reg. (EU) No 2020/878

SECTION 1: IDENTIFICATION OF SUBSTANCE/MIXTURE AND OF THE COMPANY /UNDERTAKING

1.1. Product identifier: KIM disinfecting hand dishwashing detergent

1.2. Relevant identified uses of the mixture: biocidal product, product type: 4 for professional use

Use in the first sink of the two-sink manual dishwashing technology where cleaning/degreasing and disinfection take place in the first sink in one step.

Microbiological spectrum: bactericidal, yeasticidal activity and *Human Coronavirus 229E* virus inactivating effect.

Active substance: alkyl(C_{12-16}) dimethylbenzylammonium chloride approved in PT4 by Reg. (EU) No 2021/1063

Uses advised against: other than above

1.3. Details of the supplier of the safety data sheet: CLEAN CENTER KFT.

Address: H-1164 Budapest, Csókakő u. 35.
Phone number: +36 20583 4371
E-mail: info@cleancenter.hu Website: www.cleancenter.hu

E-mail address for a competent person responsible for the safety data sheet: vincze.laszlo@cleancenter.hu

1.4. Emergency telephone numbers: Hungarian Health & Toxicological Information Service:
Working hours: +36 1 4766464 24 hrs service: +36 80 201199
Poison Control Centres in EU: https://poisoncentres.echa.europa.eu/appointed-bodies
https://echa.europa.eu/hu/support/helpdesks

SECTION 2: HAZARD IDENTIFICATION

2.1. Classification of the mixture: the product is a **hazardous mixture** according to manufacturer and in compliance with Reg. (EC) No 1272/2008 and its modifications.

Classification:	Hazard class		Category
Physical hazard:	not classified		
Health hazard:	Skin Corr. 1B	Skin corrosion/irritation	1B
	Eye Dam. 1	Serious eye damage/eye irritation	1
Environmental hazard[1]:	Aquatic Acute 1	Short term (acute) hazard to the aquatic environment	1
	Aquatic Chronic 2	Long term (chronic) hazard to the aquatic environment	2

Hazard statement of the hazards/risks of the mixture:

Skin Corr. 1B H314: Causes severe skin burns and eye damage.
Eye Dam. 1 H318: Causes severe eye damage
Aquatic Acute 1 H400: Very toxic to aquatic life.
Aquatic Chronic 2 H411: Toxic to aquatic life with long lasting effects

2.2. Label elements

Pictograms: GHS05 and GHS09

Signal word: DANGER

Hazard statements

H314 Causes severe skin burns and eye damage.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

P273 Avoid release to the environment.
P280 Wear protective gloves, protective clothing and eye protection (when transferring).
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

[1] In case of Aquatic Acute 1 and Aquatic Chronic 2 hazard the associated hazard statement of H410 is used on the label.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P501 Dispose of contents/container in accordance with national regulations

3.2. Other hazards

The product may be harmful if ingested in large quantities.
The product does not contain any PBT, vPvB components according to the criteria of Annex XIII of REACH Regulation.
The components of the product are not included in the databases of chemicals identified as endocrine disrupters and chemicals with endocrine disrupting properties.
The product does not contain ingredients listed on the candidate list of SVHC substances published by the European Chemicals Agency: https://echa.europa.eu/en/candidate-list-table

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance: does not apply.
3.2. Mixture: the product is a multi-component mixture, aqueous solution.
Hazardous components which must be listed according to Reg. (EU) No 2020/878 are listed in the table below.

Hazardous components	Concentration w/w%	Hazard class, hazard category, H-statement
Alkyl(C_{12-16}) dimethylbenzylammonium chloride* CAS No: 68424-85-1 EC No: 270-325-2 REACH Reg No: 01-2119970550-39-xxxx	9.8%	Met. Corr. 1, H290; Acute Tox. 4 (oral), H302; Skin Corr. 1B, H314; Eye Dam. 1, H318; STOT SE 3, H335 Aquatic Acute 1, H400, $M_{(acute)}$: 10 Aquatic Chronic 1, H410, $M_{(chronic)}$: 1
Alcohols (C_{12-15}), ethoxylated CAS No: 68131-39-5 EC No: polymer	5 – 15%	Acute Tox. 4 (oral), H302; Eye Dam. 1, H318; Aquatic Chronic 3, H412
Amides, coco, N,N-bis(hydroxyethyl)** CAS No: 68603-42-9 EC No: 271-657-0 REACH Reg. No.: 012119490100-53-0011	5 – 15%	Skin Irrit. 2, H315; Eye Dam. 1, H318; Aquatic Chronic 2, H411

* It is the active substance of the product (other CAS numbers exist: 85409-22-9, 8001-54-5)
** Chemical name: amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl);
INCI name: COCAMIDOPROPYL BETAIN;
None of the components listed above has harmonized classification, classification is given according to safety data sheet provided by manufacturer/supplier.
The other components are not hazardous, or their concentrations in the mixture are below the level above which their presence must be indicated or taken into account for classification under REACH.
Other components: water, perfume, colouring agent, etc.
Hazard classes, H-statements relate to pure components. Hazard classification of the product is given in Section 2.
Full texts of the H-statements and hazard classes, categories are listed in Section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures:

The instructions apply to the concentrated preparation, not for the diluted working solutions.
General information: Move affected person away from the source of exposure to fresh air or to a well-ventilated room and after on-site first aid medical attention should be provided. If toxic symptoms develop or suspicion of intoxication arises the work should be immediately discontinued. Never give drink and never induce vomiting if the victim is unconscious or suffers from convulsions. Fast and professional first aid measures can largely diminish progress and severity of the symptoms.
Inhalation: not relevant, non-realistic exposure.
Eye contact: flush eyes with large amount of lukewarm water holding the eyelids wide open and moving eyeballs continuously for at least 5-10 minutes. Eye specialist should be consulted immediately after first aid and the application of a sterile gauze dressing.
Skin contact: remove contaminated clothing and shoes. Wash off thoroughly the affected skin with running water. Contact a physician if symptoms persist.
If swallowed: DO NOT INDUCE vomiting because it can cause further laryngeal corrosion. Wash out mouth cavity with water if the victim is conscious. Let conscious person drink plenty of water to dilute the ingested product. Seek

immediate medical attention, or call Poison Centre. Show the label and/or the safety data sheet of the product to physician.

Protection of first aiders: first aid personnel should wear appropriate protective equipment if there is risk of skin or eyes contact.

4.2. Most important symptoms and effects, both acute and delayed: may cause chemical burns on skin and eyes irritation, tearing, blurred vision, redness may occur, etc. Symptoms may become worse if first aid was not thorough enough.

4.3. Indication of any immediate medical attention and special treatment needed: severity of the symptoms may vary depending on the concentration and length of exposure. Note to the physician: treat according to symptoms.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media: water spray, water fog, dry powder, dry foam, carbon-dioxide.
Use fire-extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing media: strong water jet

5.2. Special hazards arising from the substance or mixture: in fire combustion and decomposition can produce toxic gases: carbon oxides, e.g.: CO, CO2 and nitrogen oxides (NOx). The product is not flammable but is combustible.

5.3. Advice for firefighters: adapt firefighter protective equipment to surrounding fire. Wear self-contained breathing apparatus, and full protective gear in case of chemical fire. Keep containers cool by water spray.
Do not allow contaminated firefighting water to enter sewer, surface water or ground water systems.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedure
Personal protective equipment is required (protective gloves, protective clothes and safety glasses) during decontamination of large quantities. Refer to protective measures listed in Section 8.
The risk zone must be closed down and the decontamination must be performed by trained personnel equipped with the necessary protective equipment. Avoid any exposure to the product.

6.1.1. For non-emergency personal: do not touch and walk into spilled material.

6.1.2. For emergency responders: keep unnecessary and unprotected persons away. Wear protective equipment as given in Section 8. Take care of the risk of slipping. The danger zone should be restricted and only trained personnel with the necessary protective equipment are allowed to carry out the decontamination.

6.2. Environmental precautions: avoid discharge into drains or water-bodies. Prevent spilled material without treatment from entering soil, sewers, drains, and natural waterways. Comply with all national regulation pertaining to handling and disposal of hazardous waste. Inform authorities if large amount is involved.

6.3. Methods and material for containment and cleaning up: In the event of a major spillage, absorb large quantities of product into inert material with extreme absorbing properties, such as sand, earth, diatomaceous earth, vermiculite. Remove contaminated sorbent in labelled containers, keep it closed, properly labelled and dispose according to national regulations. Residues should be cleaned up by washing with plenty of water.
In case of minor spillage, the usual clean-up methods are suitable, flush small spills with plenty of water.

6.4. Reference to other sections: see also Sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling
Read and follow manufacturer's instructions and recommendations on the label.
Handle in accordance with usual practice of handling chemicals.
Work watchfully to avoid splashing, spilling, contact of skin and eyes.
Take care of slipping. Do not mix with other household cleaning and disinfecting products.

Hygiene measures: Do not eat, drink or smoke while handling. Wash hands thoroughly after handling. Take off the contaminated, soaked clothing. Wash off the affected skin with running water.

Fire and explosion protection: no special measures are required.

7.2. Conditions for safe storage, including any incompatibilities: Store in the original packaging, upright, in a dry, cool, well-ventilated, frost-free area. Keep away from food, feed, reach of children and pets.
Recommended storage temperature: 5 – 30°C.
Consider storage conditions during transport.
Shelf life: 12 months from date of manufacture if it is stored properly.

7.3. Specific and uses(s): see Section 1.2. For manual dishwashing in catering, canteens, institutional area, food and beverage industries. It should be used in the first sink of a two-phase manual dishwashing technology where cleaning/degreasing and disinfection take place in the first sink in one step. User category: for professional use.
Users should always read the instructions for use and follow the instructions for safe handling and use.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters
Occupational exposure limits: no occupational exposure limit in air is set up on ingredients of the product.

DNELs and PNECs for alkyl(C_{12-16}) dimethylbenzylammonium chloride

Workers: DNEL (long term exposure via inhalation route, systemic effects): 3.96 mg/m^3
DNEL (long term exposure via dermal route, systemic effects): 5.7 mg/kg bw/day
General population: DNEL (long term exposure via inhalation route, systemic effects): 1.64 mg/m^3
DNEL (long term exposure via dermal route, systemic effects): 3.4 mg/kg bw/day
DNEL (long term exposure via oral route, systemic effects): 3.4 mg/kg bw/day
PNEC (fresh water): 0.001 mg/L; PNEC (marine water): 0.001 mg/L
PNEC (STP): 0.4 mg/L; PNEC (soil): 7 mg/kg dw
PNEC (freshwater sediment): 12.27 mg/kg dw
PNEC (marine water sediment): 13.09 mg/kg dw

8.2. Exposure controls
Care must be taken to prevent exposure to the product, general occupational and hygiene measures should be kept during handling the product. Workers should be aware that the concentrated product can cause serious eye damage and skin burns.

Engineering controls
- Ensure that the usual protective measures of handling chemicals are kept.
- Provide appropriate personal protective equipment, eye-wash bottle or eye-wash fountain.

Hygiene measures
- Do not eat, drink or smoke while handling.
- Wash hands thoroughly after handling.
- Work watchfully to avoid splashing, spilling, contact of concentrated product with skin and eyes.

Personal protective equipment
- **Eye/face protection:** wear safety glasses if splashing is possible, in case of industrial operations, decontamination, handling large quantities, transferring, mixing and loading, etc. Personal protective equipment for eye protection should comply with EN 166 standard. Keep eyewash bottle ready and easily accessible at the workplace.
- **Hand and skin protection:** wear resistant gloves (e.g., latex, nitrile rubber) complying with EN 374 standard. When choosing the material of the gloves, take in consideration the expected exposure to the product (short or long exposure times, mechanical stress, risk of full contact, risk of splash etc.). Data on permeability, break-through time and mechanical resistance of the gloves are given by the manufacturers of gloves. After skin contact with concentrated product, wash affected skin immediately with running water.
- **Respiratory protection:** not necessary.
- **Thermal hazard:** not relevant.

Environmental exposure controls: Observe handling, loading and storage measures. Large quantities should be stored to prevent from entering watercourses, soil, sewerage system. Avoid accidental entry into drains and water bodies.

Personal protective equipment must be chosen according to the workplace, the quantity and concentration of the hazardous preparation. The above applies to the activity and conditions of use for which it is intended, under normal conditions. If the work is carried out under different or exceptional conditions, it is recommended that an expert be consulted to decide on the further actions to be taken and the personal protective equipment to be used.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

a) Physical state:	liquid
Appearance:	homogenous, clear, translucent
b) Colour:	coloured
c) Odour:	perfumed
Odour threshold:	no data available

d) Melting point/freezing point:	no data for the mixture data are not available for the components
e) Boiling point/ initial boiling point/range:	no data for the mixture alkyl(C_{12-16}) dimethylbenzylammonium chloride: 102°C
f) Flammability:	not flammable
g) Lower or upper explosion limit:	not relevant, mixture does not show explosion hazard
h) Flash point:	>100°C, predicted value, mixture is an aqueous solution
i) Auto ignition temperature:	the mixture does not auto ignite
j) Decomposition temperature:	no data
k) pH:	5 – 5.5 (20°C)
l) Kinematic viscosity:	250 ± 5 rel% mm^2/s (20°C) 43.65 ± 5 rel% mm^2/s (40°C)
m) Solubility:	indefinitely with water
n) Partition coefficient/log$P_{o/v}$:	not relevant, the product is a mixture alkyl(C_{12-16}) dimethylbenzylammonium chloride: 0.5
o) Vapour pressure:	no data for the mixture alkyl(C_{12-16}) dimethylbenzylammonium chloride: 3,2 hPa (20°C)
p) Density/relative density:	1.008 ± 0.002 g (20°C)
q) Relative vapour density	no data for the mixture; no data for the ingredients
r) Particle characteristics:	not relevant, the mixture is liquid

9.2. Other information

Explosive properties:	not considered to be explosive
Oxidizing properties:	not considered to have oxidizing properties
Surface tension:	4,11 x 10^{-2} N/m ± 5 rel% (23°C)

9.2.1. Information with regard to physical hazard classes: classification into physical hazard classes is not necessary according to the composition. The product is non-corrosive to metals according to the results of the UN RTDG 37.4 C1 test (uniform and local corrosion on steel and aluminum plates). Knowledge of the missing parameters is not necessary to assess the physico-chemical hazard of the mixture.

9.2.2. Other safety characteristics: not known.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity: not reactive.

10.2. Chemical stability: stable if it is handled, stored according to instructions.

10.3. Possibility of hazardous reactions: not known.

10.4. Conditions to avoid: heat, frost, mixing with incompatible materials.

10.5. Incompatible materials: do not mix with other household cleaning products and disinfecting agents.

10.6. Hazardous decomposition products: not known at normal use, storage conditions.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

No toxicological study was performed with this product. Classification of the product is based on composition and classification of ingredients.

Acute toxicity (oral, dermal and inhalation): the product should not be classified in any of the acute toxicity hazard classes based on the oral, dermal and inhalation ATE_{mix} values.

Alkyl(C_{12-16}) dimethylbenzylammonium chloride: oral LD_{50} (rat): 426 mg/kg bw
oral LD_{50} (rat): 795 mg/ttkg bw (OECD 401)

Alcohols (C_{12-15}), ethoxylated: oral LD_{50} (rat): > 1000 mg/kg bw

Amides, coco, N,N-bis(hydroxyethyl): oral LD_{50} (rat): > 2000 mg/kg bw

Skin corrosion/irritation: based on composition the product is considered to be skin corrosive, classification into hazard class Skin Corr. 1B is necessary.

Serious eye damage/eye irritation: based on available data classification criteria are met. The product can cause serious eye damage; classification: Eye Dam. 1.

Respiratory or skin sensitization: sensitization is not expected based on the available data and information of the ingredients.

Carcinogenicity: classification criteria are not met for carcinogen hazard class based on the information and data of ingredients. None of the components is classified as carcinogen.
Germ-cell mutagenicity: based on available data classification criteria are not met, components are not mutagenic chemicals.
Reproductive toxicity: not known, based on available data and information classification criteria are not met. None of the components is toxic to reproduction.
Specific target organ toxicity single exposure (STOT SE): based on data and information on the ingredients the classification criteria are not met.
Specific target organ toxicity repeated exposure (STOT RE): based on data and information on the ingredients the classification criteria are not met for this hazard class.
Aspiration hazard: not anticipated to present aspiration hazard based on composition.

11.2. Information on other hazards: Ingestion of large quantities may cause damage to mucous membranes and gastrointestinal tract. See also Section 4.2. The mixture does not contain any endocrine disrupting properties based on the criteria set out in Regulations (EU) No 2017/2100 and 2018/605.

When working with the product, the general rules for handling chemicals must be observed.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity: no ecotoxicological study was performed. Due to the concentration and M-factors of alkyl (C_{12-16}) dimethylbenzylammonium chloride the product is very toxic to aquatic life with long lasting effects according to Table 4.1.1 and 4.1.2. in Reg. (EC) No 1272/2008.
Data for alkyl (C_{12-16}) dimethylbenzylammonium chloride:

LC_{50} (*Lepomis gibbosus,* 96 h): 0.515 mg/L
EC_{50} (*Daphnia magna,* 48 h): 0.016 mg/l, ill. 5.9 ppb
ErC_{50}: (*Selenastrum capricornutum*, 96 h): 30-49 µg/L

Alcohols (C_{12-15}), ethoxylated: EC_{50} (*Daphnia magna,* 48 h): 1 – 10 mg/L
LC_{50} (fish, 96 h): 1 – 10 mg/L
NOEC (alga, 72 h): 0,1 – 1 mg/L

Amides, coco, N,N-bis(hydroxyethyl): LC_{50} (*Daphnia magna,* 48 h): 1.3 – 1.6 mg/L
LC_{50} (fish, 96 h): 1.4 – 1.6 mg/L
EC_{50} (alga, 72 h): 3.77 mg/L

12.2. Persistence and degradability: the surfactant(s) contained in this mixture comply with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents.
Alkyl(C_{12-16}) dimethylbenzylammonium chloride: 95% (28 day) – OECD 301B; 63% (28 day) – OECD 301D
Alcohols (C_{12-15}), ethoxylated: > 60%, 28 day
Amides, coco, N,N-bis(hydroxyethyl): > 60%, 28 day

12.3. Bioaccumulative potential: not expected based on $logP_{o/w}$ values of the components.
Alkyl(C_{12-16}) dimethylbenzylammonium chloride: $logP_{o/w}$: 0.5 – 2.75 and BCF: 67 – 160

12.4. Mobility in soil: likely mobile.

12.5. Results of PBT- and vPvB assessment: not available for all components. alkyl(C_{12-16}) dimethylbenzylammonium chloride is not PBT, and vPvB substance, but toxic to aquatic environment.

12.6. Endocrine disrupting properties: components are not included in the endocrine disruptor and potential endocrine disruptor databases. Alkyl(C_{12-16}) dimethylbenzylammonium chloride has no ED properties with respect to humans and with respect to non-target organism no conclusion can be drawn based on the available data according to the adopted BPC opinions.[2]

12.7. Other adverse effects: not known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods
The generation of waste should be minimized or avoided wherever possible.
This product and its container must be disposed of in a safe way.

Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and national authority requirements.
When handling waste the safety precautions applying to handling of the product should also be considered.

[2] Opinion on the application for approval of the active substance: Alkyl(C_{12-16}) dimethylbenzylammonium chloride; Product type: 4 ECHA/BPC/268/2020; Adopted 6 October 2020

Do not empty waste into drains, rivers, watercourses, ponds, standing waters, natural waterways.
Contact your sales representative or local environmental or health authorities for approved disposal methods.

EWC codes may vary depending on place of use, circumstances of waste generation, e.g.: 07 06 01* or 20 01 29*

EWC code of packaging material that has been thoroughly cleaned with water: 15 01 02

SECTION 14: TRANSPORT INFORMATION

According to the international transport (ADR/RID, IMDG and ICAO/IATA) regulations the product **is dangerous goods.**

14.1. UN number or ID number: 1903

14.2. UN proper shipping name: DISINFECTANT LIQUID, CORROSIVE, N.O.S. (contains: KIM disinfecting liquid hand dishwashing detergent

14.3. Transport hazard class(es): 8

ADR/RID: Special provisions: 274, Classification code: C9
Hazard identification No: 80, Labels: 8
Hazard Bar Code: 8 + Environmental ("fish-wood")
Transport category: 3 Tunnel restriction code: (E)
Limited quantities: 5 L, Excepted quantities: E1

IMDG: EmS: F-A, S-B

14.4. Packing group: III

14.5. Environmental hazards: yes, marine pollutant, Aquatic Acute 1 – hazardous to the aquatic environment, acute hazard; (KIM disinfecting liquid hand dishwashing detergent)

14.6. Special precautions for users: Transport within the user's premises: always in a closed container in an upright position. The personnel carrying out the transport should be aware of what to do in the event of an accident or spillage.

14.7. Maritime transport in bulk according to IMO instruments: not relevant

SECTION 15: REGULATORY INFORMATION

15.1. Safety health and environmental regulations/legislation specific for mixture

Use biocides safely. Always read the label and product information before use.

The product is not covered by Reg. (EC) No 1005/2009 on substances that deplete the ozone layer.

The product is not covered by Reg. (EU) No 2019/1021 on persistent organic pollutants.

Relevant European Acts

Regulation (EU) No 528/2012 of the European parliament and of the Council concerning the making available on the market and use of biocidal products and its modifications

Commission Implementing Regulation (EU) No 2021/1063 approving alkyl (C12-16) dimethylbenzyl ammonium chloride as an active substance for use in biocidal products of product-types 3 and 4

Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) and its modifications

Regulation (EC) No 1272/2008 and of the European Parliament and of the Council on Classification, labelling and packaging of substances and mixtures and its modifications

Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work and its modifications: https://echa.europa.eu/hu/cad-and-cmd-legislation

Commission Directive 2006/15/EC of 7 February 2006 establishing a second list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Directives 91/322/EEC and 2000/39/EC

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste

15.2. Chemical safety assessment: has not been carried out.

SECTION 16: OTHER INFORMATION

The safety data sheet applies to the delivered product.
The information contained in the safety data sheet is correct to our best knowledge on the date of issue; it is intended as a guide for safe use, handling, disposal, storage and transport of the delivered product.
Safety data sheet does not replace product specification.
The information contained in the safety data sheet does not represent a guarantee of product properties nor does it create any legal obligation.
Consumers, users themselves are responsible for the risks and hazards resulting from the use of the product. Manufacturer, distributor do not assume any warranty or responsibility and expressly disclaim liability for loss, damage

or expense arising out of or in any way connected to the handling, storage, use or disposal of the product because conditions of application, handling, storage, use or disposal of the product beyond their control.

Training recommendation: knowledge of the safety data sheet. In the annual occupational safety training workers should be informed about the hazards of handling chemicals and the general safety and health protection measures.

SAFETY DATA SHEET SHOULD ALWAYS BE AVAILABLE FOR USERS AT HAND.

Classification of the mixture: the product is classified by calculations methods. Evaluation is in accordance of Article 9 (1) of Reg. (EC) No 1272/2008; the criteria for classification for each hazard class or differentiation are applied according to Parts 2 to 5 of Annex I. of Reg. (EC) No 1272/2008.

Full text of H-statements and hazard classes, codes for the pure substance(s) referred to in Section 3:
Acute Tox.: acute toxicity, Aquatic Acute: hazardous to the aquatic environment, acute hazard; Aquatic Chronic: hazardous to the aquatic environment, chronic hazard; Eye Dam.: serious eye damage; Skin Irrit.: skin irritation; Skin Corr.: skin corrosion; Met. Corr.: substance or mixture corrosive to metals

H290 May be corrosive to metals.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

Other abbreviations

ADR European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE_{mix} Acute Toxicity Estimate
BCF bioconcentration factor
BPC Biocidal Product Committee
CAS Chemical Abstract Service, number for the identification of chemical substances
CLP Classification, Labelling, Packaging –used as abbreviation of Regulation (EC) No 1272/2008
DNEL Derived No Effect Level: EC_{50} 50% of maximal Effective Concentration
EC substance identification number in the European Union
ED Endocrine Disruptor
ECHA European Chemicals Agency
EWC European Waste Catalogue
GHS Globally Harmonized System of Classification and Labelling of Chemicals
IATA International Air Transport Association
ICAO International Civil Aviation Organization Technical Instruction for the Safe Transport of Dangerous Goods by Air
IMDG International Maritime Dangerous Goods Code
IMO International Maritime Organization
INCI International Nomenclature of Cosmetics Ingredients
LC_{50} lethal concentration to 50% of a test population (median lethal concentration)
LD_{50} Lethal dose to 50% of a test population (median lethal dose)
$logP_{o/w}$ logarithm of n-octanol-water partition coefficient ($K_{o/w}$)
M multiplying factor, it is used to derive by summation method the classification of mixtures
$M_{(acute)}$ M-factor of aquatic acute toxicity
$M_{(chronic)}$ M-factor of aquatic chronic toxicity
NOEC No Observed Effect Concentration
OECD Organisation for Economic Co-operation and Development
PBT persistent, bio accumulative and toxic
PNEC Predicted No Effect Concentration
ppb parts per billion
REACH Registration, Evaluation, Authorisation and Restriction of Chemicals, Reg. 1907/2006/EC
REACH reg. No.: REACH registration number
RID Dangerous Goods Regulations – International Carriage of Dangerous Goods by Rail
STP Sewage Treatment Plant
SVHC Substance of Very High Concern
vPvB very Persistent and very Bio accumulative

w/w% weight/mass concentration

History: This safety data sheet (version: 2.0-EN) is issued 13 November 2023.
Occupational safety advice for safe use of the product: +36 2 0582 4371 (9:00 – 14:00 on weekdays)

Safety data sheet can be downloaded from site: http://adatlapok.cleancenter.hu/biztonsagiadatlapok/