



## 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: **KLINIKO-SUN 10X disinfectant concentrate**

#### 1.2. Relevant identified uses of the mixture: biocidal product, product types: 2 and 4

Cleaning and disinfection of surfaces in one step. User category: professional

Active substance: **didecyldimethylammonium chloride (DDAC)** is listed for all product types of disinfectants in the Reg. (EU) No 1062/2014 on the work programme for the systematic examination of all existing active substances contained in biocidal products referred to in Reg. (EU) No 528/2012.

Microbiological spectrum: bactericidal, yeasticidal, selective virucidal activity

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](mailto:info@cleancenter.hu) Website: [www.cleancenter.hu](http://www.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 Irrit. 2	Skin corrosion/irritation	2
	Eye Irrit. 2	Serious eye damage/eye irritation	2
Environmental hazard:	Aquatic Chronic 3	Long term (chronic) hazard to the aquatic environment	3

#### 2.2. Label elements

Pictogram: GHS07

Signal word: WARNING



#### Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long lasting effects.

#### Precautionary statements

P260 Do not breathe spray.

P273 Avoid release to the environment.

P280 Wear protective gloves, protective clothing, eye protection.

P302+P352 IF ON SKIN: Wash with plenty of water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P314 Get medical attention if you feel unwell.

The product label shall comply with the requirements of Art. 69 of Reg. (EU) No 528/2012.

#### 3.2. Other hazards

The product does not contain any PBT, vPvB components according the criteria set out in Annex XIII of REACH Regulation. The product does not contain substances classified as SVHC (Substances of Very High Concern) and substances which are on the candidate list of SVHC published by the European Chemicals Agency (<https://echa.europa.eu/candidate-list-table>).



## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

**3.1. Substance:** does not apply.

**3.2. Mixture:** the product is a mixture.

Hazardous components which must be listed according to Reg. (EU) No 2020/878 are listed in the table below.

Hazardous components	Concentration	Hazard class, hazard category, H-statement
Didecyldimethylammonium chloride* CAS No: 7173-51-5 EC No: 230-525-2 Index No: 612-131-00-6	1.25%	Acute Tox. 4 (oral), H302; Skin Corr. 1B, H314; Eye Dam. 1, H318; Aquatic Acute 1, H400, M <sub>(acute)</sub> : 10 Aquatic Chronic 2, H411
Ethyl alcohol CAS No: 64-17-5 EC No: 200-578-6 Index No: 603-002-005	5 – 9%	Flam. Liq. 2, H225; Eye Irrit. 2, H319
1-Dodecanamine, N,N-dimethyl-, N-oxide CAS No: 1643-20-5 EC No: 216-700-6	<1%	Acute Tox. 4 (oral), H302; Skin Irrit. 2, H315; Eye Dam. 1, H318; Aquatic Acute 1, H400, M <sub>(acute)</sub> : 1 Aquatic Chronic 2, H411
Isopropyl alcohol CAS No: 67-63-0 EC No: 200-661-7 Index No: 603-117-00-0	<1%	Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336

\* Chemical name: N,N-didecyl-N,N-dimethylammonium chloride; harmonised classification is silent about acute and chronic hazard to the aquatic environment; hazard classes are given according to safety data sheet of the supplier.

The other components (water, colorant, perfume, etc.) are not hazardous, or their concentrations are low enough not to be taken into consideration in the classification and labelling of the product according to the relevant regulations.

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:

Fast and professional first aid measures can largely diminish progress and severity of the symptoms.

**General information:** If toxic symptoms develop or suspicion of intoxication arises the work should be immediately discontinued. Immediately 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. Show the label or safety data sheet of the product. Never give drink and never induce vomiting if the victim is unconscious or suffers from convulsions.

**Inhalation:** Move to fresh air. Get medical attention if symptoms persist.

**Eye contact:** Flush eyes with large amount of lukewarm water holding the eyelids wide open and moving eyeballs continuously for at least 15 minutes. After first aid immediately seek ophthalmologist especially if symptoms persist.

**Skin contact:** Wash off thoroughly the affected skin with running water. Contact a physician if symptoms persist.

**If swallowed:** DO NOT INDUCE vomiting! Take care to avoid the risk of foam aspiration. If vomiting occurs, keep head low so that stomach content does not get into lungs. Wash out mouth cavity with water if the victim is conscious. Let conscious person drink plenty of water.

**4.2. Most important symptoms and effects, both acute and delayed:** skin and eye irritation.

**4.3. Indication of any immediate medical attention and special treatment needed:** not known.

Note to the physician: treat according to symptoms.

## SECTION 5: FIREFIGHTING MEASURES

**5.1. Extinguishing media:** water spray, water fog, dry powder, 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:** the product contains less than 10% highly flammable ethyl alcohol. Ethyl alcohol vapours may form flammable and explosive air – alcohol mixtures. Ethyl alcohol vapours are heavier than air, may accumulate near the floor and travel considerable distance to a source of ignition and may flash back. Prevent build-up of vapours to explosive concentrations. In fire toxic gases can be formed: carbon oxides, nitrogen oxides.



**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.  
Use water spray to keep fire-exposed containers cool.  
Do not allow contaminated firefighting water to enter sewer, surface water, or ground water systems.  
Explosive limits: ethyl alcohol: lower: 3.3 v/v%; upper: 19 v/v%

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

Take care of risk of slipping. Eliminate all ignition sources, keep unauthorised personnel away. 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 persons equipped with the protective equipment.

**6.1.1. For non-emergency personnel:** do not touch and walk into spilled material. No smoking. Ventilate closed spaces before entering them.

**6.1.2. For emergency responders:** eliminate ignition sources, open flames, etc. Keep unnecessary and unprotected persons away from the spillage. Wear protective equipment as given in Section 8. Prevent further leakage or spillage if safe to do so. Take care of the risk of slipping.

**6.2. Environmental precautions:** prevent entry into drains or water-bodies. Dispose of waste in accordance with local, national regulations 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 not flammable, not combustible and inert material with extreme absorbing properties, such as sand, earth, diatomaceous earth, vermiculite. Put contaminated sorbent in labelled containers, keep it closed 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 recommendations on the label.

Handle in accordance with usual practice of handling chemicals.

Work watchfully to avoid splashing, spilling, contact of skin and eyes.

There is risk of slipping on the floor. Do not mix with other household cleaning and disinfecting products.

**Fire and explosion protection:** do not handle and store near open flames, source of heat and sources of ignition.

**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.

### 7.2. Conditions for safe storage, including any incompatibilities

Store in the original packaging, upright, in a cool, dry, well-ventilated, frost-free area.

Keep away from food, drinks, feeding stuffs, heat and ignition sources.

Keep out of reach of children. Recommended storage temperature: 5 – 30°C.

Consider storage conditions during transport.

Shelf life: 24 months from date of manufacture if it is stored properly.

**7.3. Specific and uses(s):** see Section 1.2. User category: professional.

Users should always read the instructions for use and follow the instructions for safe handling and use. One step cleaning and disinfection of washable surfaces (massage beds, furniture, furnishings, sun-tanning devices, air conditioners, etc.) in institutions, in pharmaceutical industry, in cosmetic industry, at wellness centres, fitness clubs, and beauty centres.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters/Occupational exposure limits

**Ethyl alcohol:** TWA: 1920 mg/m<sup>3</sup> (EH40/2005, Fourth Edition 2020)

ÁK: 1900 mg/m<sup>3</sup>, CK: 3800 mg/m<sup>3</sup> – 5/2020. (II.6.) ITM Hungarian decree

**Isopropyl alcohol:** TWA: 999 mg/m<sup>3</sup>, STEL: 1250 mg/m<sup>3</sup> (EH40/2005, Fourth Edition 2020)

ÁK: 500 mg/m<sup>3</sup>, CK: 1000 mg/m<sup>3</sup> – 5/2020. (II.6.) ITM Hungarian decree



GESTIS International limit values: <https://limitvalue.ifa.dguv.de>

## 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.

### Engineering controls

- Provide adequate ventilation.
- Ensure that the usual protective measures of handling chemicals are kept.
- Provide personal protective equipment and eyewash bottle.

### Hygiene measures

- Do not eat, drink or smoke while handling.
- Wash hands thoroughly after handling.

### Personal protective equipment

- **Eye/face protection:** not necessary  
Wear safety glasses if splashing is possible, in case of industrial operations, decontamination, handling large quantities, mixing and loading, etc. Personal protective equipment for eye protection should comply with EN 166 standard.
- **Hand and skin protection:** Wearing protective gloves complying with EN 374 standard, e.g. NBR (nitrile rubber, latex) and working clothes are recommended when handling large quantities, during decontamination, industrial operations, during mixing, loading and in case of long-term work, etc. When choosing safety gloves take in consideration the expected exposure to the product (short or long, mechanical stress, risk of full contact, risk of splash etc.), breakthrough time, breakdown parameters, not only the material of the gloves. Parameters may vary depending on the manufacturers.
- **Respiratory protection:** not necessary.
- **Thermal hazard:** not relevant.

**Environmental exposure controls:** Observe handling, loading and storage measures. Avoid release into sewers, drains.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

Physical state:	liquid
Appearance:	coloured, liquid, homogenous, transparent liquid
Odour:	perfumed
Odour threshold:	not determined
pH:	5.5 – 6.0 at 20°C
Melting point:	not relevant
Initial boiling point and range:	not determined
Flash point:	>60°C, predicted
Evaporation rate:	no data
Flammability (solid, gas):	not relevant
Explosive properties:	not considered to be explosive
Explosive limits:	no data on the product ethyl alcohol lower: 3,3 v/v%, upper: 19 v/v%
Vapour pressure:	no data
Vapour density:	no data
Density:	0.98 g/cm <sup>3</sup> at 20°C
Solubility:	unlimited in water
Partition coefficient (logP <sub>o/w</sub> ):	not relevant, it is a mixture
Auto-ignition temperature:	not self-igniting 363°C (ethyl alcohol)
Decomposition temperature:	no data, does not decompose at ambient temperature
Viscosity:	no data
Particle characteristics:	not relevant
Oxidising properties:	not considered to have oxidising properties

### 9.2. Other information

9.2.1. Information with regard to physical hazard classes: classification into physical hazard classes is not necessary according to the composition as ethyl alcohol content is less than 10%.

9.2.2. Other safety characteristics: not known.



## SECTION 10: STABILITY AND REACTIVITY

- 10.1. Reactivity:** not reactive. No dangerous reaction is known under condition of normal use
- 10.2. Chemical stability:** stable if it is handled and stored according to instructions.
- 10.3. Possibility of hazardous reactions:** not known.
- 10.4. Conditions to avoid:** heat, ignition sources, 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 and 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):** criteria for classification into acute toxicity hazard classes are not met according to ATE<sub>mix</sub> values.

**Skin corrosion/irritation:** based on available data classification criteria are met, the product is skin irritant.

**Serious eye damage/eye irritation:** based on available data classification criteria are met, the product is eye irritant.

**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.

**Reproductive toxicity:** not known, based on available data and information classification criteria are not met. None of the components has reproductive toxicity.

**Specific target organ toxicity single exposure (STOT SE):** based on information on the ingredients the classification criteria are not met.

**Specific target organ toxicity repeated exposure (STOT RE):** based on 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:** not known.

## SECTION 12: ECOLOGICAL INFORMATION

**12.1. Toxicity:** no ecotoxicological study was performed.

Due to the concentration of didecyldimethylammonium chloride the product is harmful to aquatic life with long lasting effects according to Table 4.1.2. in Reg. (EC) No 1272/2008.

Aquatic toxicity data for didecyldimethylammonium chloride:

LC<sub>50</sub> (*Brachydanio rerio*, 96 h): 0.1 – 1 mg/L

EC<sub>50</sub> (*Daphnia magna*, 48 h): 0.06 mg/L

NOEC (21 day): 0.021 mg/L

EC<sub>50</sub> (*Selenastrum Capricornutum*, 96 h): 0.12 mg/L

**12.2. Persistence and degradability:** didecyldimethylammonium chloride is readily biodegradable (OECD 301D), ethyl alcohol and isopropyl alcohol are biodegradable

**12.3. Bioaccumulative potential:** not expected based on logP<sub>o/w</sub> values of the components.

Didecyldimethylammonium chloride: BCF: 2.1. Alcohols do not bioaccumulate.

**12.4. Mobility in soil:** likely mobile.

**12.5. Results of PBT and vPvB assessment:** components are not PBT, and vPvB substances.

**12.6. Endocrine disrupting properties**

Based on the available data none of the co-formulants triggered an alert for potential endocrine disruption properties.

Didecyldimethylammonium 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 adopted BPC opinions of it.

None of the components is classified as carcinogen category 2 and toxic for reproduction category 2.

**12.7. Other adverse effects:** not known.



## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

The generation of waste should be minimised 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 be considered.

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 code may vary depending on place of use, circumstances of waste generation.

## SECTION 14: TRANSPORT INFORMATION

According to the international transport (ADR/RID, IMDG, ICAO/IATA) regulations the product **is not dangerous goods**.

**14.1. UN number or ID number:** not relevant.

**14.2. UN proper shipping name:** not relevant.

**14.3. Transport hazard class(es):** not relevant.

**14.4. Packing group:** not relevant.

**14.5. Environmental hazards:** not relevant.

**14.6. Special precautions for users:** not relevant.

**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

#### 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

Regulation (EU) No 1062/2014 on the work programme for systematic examination of all existing active substances contained in biocidal product referral to in Reg (EU) No 528/2012

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

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 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 is beyond their control.

**Training recommendation:** 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 WORKERS AT HAND.

**Classification of the product:** the product is classified by calculations methods in accordance with 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 Irrit.: eye irritation; Eye Dam.: serious eye damage; Skin Irrit.: skin irritation; Skin Corr.: skin corrosion; Flam. Liq.: flammable liquids; STOT SE: specific target organ toxicity, single exposure

- H225 Highly flammable liquid and vapour.
- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H336 May cause drowsiness or dizziness.
- H400 Very toxic to aquatic life.
- 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
- ÁK allowable average concentration of a substance in the air of the workplace acceptable during 8 hours work shift
- ATE<sub>mix</sub> Acute Toxicity Estimate
- BCF Bioconcentration factor
- BPC Biocidal Product Committee
- CAS Chemical Abstract Service, number for the identification of chemical substances
- CK allowable peak concentration of a substance refers to acceptable exposure in the air of the workplace over a short period of time.
- CLP Classification, Labelling, Packaging –used as abbreviation of Regulation (EC) No 1272/2008
- EC<sub>50</sub> 50% of maximal Effective Concentration
- ECHA European Chemicals Agency
- EH/2005 workplace exposure limits; <https://www.hse.gov.uk/pubns/priced/eh40.pdf>
- EDS Endocrine Disruptor Substance
- EWC European Waste Catalogue
- GESTIS Information system on hazardous substance of German Social Accident Insurance
- 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
- M multiplying factor, it is used to derive by summation method the classification of mixtures
- LC<sub>50</sub> lethal concentration to 50% of a test population (median lethal concentration)
- LD<sub>50</sub> Lethal dose to 50% of a test population (median lethal dose)
- logP<sub>o/w</sub> logarithm of n-octanol-water partition coefficient (K<sub>o/w</sub>)
- M<sub>(acute)</sub> M-factor of aquatic acute toxicity; M<sub>(chronic)</sub> 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
- REACH Registration, Evaluation, Authorisation and Restriction of Chemicals, Reg. 1907/2006/EC
- RID Dangerous Goods Regulations – International Carriage of Dangerous Goods by Rail
- STEL Short-term exposure limit - 15 minutes reference period
- SVHC Substance of Very High Concern
- TWA long-term workplace exposure limit - 8 hr reference period
- vPvB very Persistent and very Bio accumulative
- v/v% volume/volume %

**History:** This safety data sheet (version: 1.0-EN) is issued 25 January 2021.

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: