



## 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-TEMPO hand & surface sanitizer**

**1.2. Relevant identified uses of the mixture:** biocidal product, product types: 1, 2 and 4

Alcohol base hygienic handrub for sanitizing hands and surface disinfectant; for professional use

**Microbiological spectrum:** bactericidal, fungicidal and selective virucidal activity

**Active substances:** **ethyl alcohol** is listed in the Reg. (EU) No 1062/2014 in product types 1, 2 and 4 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;

**isopropyl alcohol** is approved in product types 1, 2 and 4 under Reg. (EU) No 2015/407.

**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 20 583 4371

E-mail: [info@cleancenter.hu](mailto:info@cleancenter.hu) Website: [www.cleancenter.hu](http://www.cleancenter.hu)

E-mail address for a competent person responsible for the safety data sheet: [vincze.laszlo@cleancenter.hu](mailto: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:	Flam. Liq. 2	Flammable liquids	2
Health hazard:	Eye Irrit. 2	Serious eye damage/eye irritation	2
Environmental hazard:	not classified		

**Hazard statement for the mixture:** Flam. Liq.2 H225: Highly flammable liquid and vapour.  
Eye Irrit. 2 H319: Causes serious eye irritation.

**2.2. Label elements**

**Pictograms:** GHS02, GHS07



**Signal word:** DANGER

**Hazard statements**

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

**Precautionary statements**

**P102** Keep out of reach of children.

**P210** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

**P233** Keep container tightly closed.

**P260** Do not breathe vapours, spray.

**P280** Wear eye protection - in case handling large quantities.

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

**P337+P313** If eye irritation persists: Get medical advice/attention

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

**P403+P235** Store in a well-ventilated place. Keep cool.

**P501** Dispose of contents/container in accordance with national regulations.



### 3.2. Other hazards

The product does not contain any PBT, vPvB components according to 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>). The components of the product are not included in the databases of chemicals identified as endocrine disruptors and chemicals with endocrine disrupting properties.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

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

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

Hazardous components are the active substances of the mixtures, occupational exposure limits are given in Section 8.

Hazardous components	Concentration	Hazard class, hazard category, H-statement
Ethyl alcohol (ethanol) CAS No: 64-17-5 EC No: 200-578-6 Index No: 603-002-005 REACH Reg. No: 01-2119457610-43-xxxx	55%	Flam. Liq. 2, H225; Eye Irrit. 2, H319
Isopropyl alcohol (2-propanol) CAS No: 67-63-0 EC No: 200-661-7 Index No: 603-117-00-0 REACH Reg. No: 01-2119457558-25-xxxx	15%	Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336

The other components 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. 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.

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 water holding the eyelids wide open and moving eyeballs continuously for at least 15 minutes. After first aid immediately seek ophthalmologist if symptoms persist after washing.

**Skin contact:** If accidentally on the skin wash off thoroughly the affected area with running water.

**If swallowed:** DO NOT INDUCE vomiting! 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:** eye irritation, inhalation of large quantities may cause drowsiness or dizziness.

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

Note to the physician: Treat symptomatically.

## 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 highly flammable alcohols. Alcohol vapours may form flammable and explosive air – alcohol mixtures. 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.

**5.3. Advice for firefighters:** wear self-contained breathing apparatus and complete protective clothing.

Use water spray to keep fire-exposed containers cool. The product is highly flammable mixture.



Do not allow contaminated firefighting water to enter sewer, surface water, or ground water systems.  
Explosive limits: ethyl alcohol lower: 3.5 v/v%, upper: 15 v/v%  
isopropyl alcohol lower: 2 v/v%, upper: 12 v/v%

## SECTION 6: ACCIDENTAL RELEASE MEASURES

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

Ventilate! Eliminate all ignition sources, keep unauthorized 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.

**6.1.1. For non-emergency personnel:** 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 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 combustible, inert material with extreme absorbing properties, such as sand, earth, diatomaceous earth, vermiculite. Remove 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

Ensure good ventilation of the work station. Read and follow manufacturer's recommendations on the label.

Handle in accordance with usual practice of handling highly flammable chemicals.

Ethyl alcohol and isopropyl alcohol concentration in the air should not exceed the occupational exposure limits.

Avoid splash and spill the mixture! There is a risk of slipping on the floor. Do not mix with other disinfecting products.

**Fire and explosion protection:** Open flames and smoking are prohibited! Do not spray on open flame or other ignition sources. The vapours of the product may form an explosive mixture with air.

Do not use the mixture near ignition sources! Keep containers closed when not in use.

Protect the product from sunlight, radiant heat, keep it away from sources of ignition!

**Hygiene measures:** Do not eat, drink or smoke while handling. Take off the contaminated, soaked clothing.

Wash off the accidentally affected skin with running water.

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

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

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

Keep out of reach of children.

Recommended storage temperature: ambient/room temperature.

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 also Section 1.2. User category: professional

Hygienic handrub in food industry, catering, professional kitchens, in institutional and industrial (cosmetics, pharmaceutical, etc.) areas, etc.

For disinfection of alcohol-resistant surfaces, devices, equipment, etc. in food industry, other industrial areas (cosmetics, pharmaceutical, etc.) and institutional areas, etc.

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

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

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

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



## 8.2. Exposure controls

Prevent inhalation of vapours and spray with careful work.  
General occupational safety and hygiene measures must be observed.  
Users should be aware that the product is highly flammable.

### Engineering controls

- Adequate ventilation is required.
- Provide eyewash bottle and personal protective equipment.

### Hygiene measures

- Do not eat, drink or smoke while handling.
- Take off the soaked clothes, shoes.

### Personal protective equipment

- **Respiratory protection:** not necessary. Wear a respirator if the occupational exposure limit is exceeded. Use a particulate filter respirator with a filter cartridge type A or a combined filter cartridge type A-P2 or ABEK-P2 to protect against organic vapours according to EN 14387.
- **Eye/face protection:** not necessary. Eye protection in accordance with EN 166 is required when there is a risk of splashing into the eyes, e.g., when handling large quantities, when transferring or during decontamination.
- **Skin and hand protection:** not necessary; the product is hand sanitizer.  
Wearing protective gloves is recommended in case of long-term work with the product, decontamination, handling large quantities, etc.
- **Thermal hazard:** not relevant.

**Environmental exposure controls:** avoid release into sewers, drains.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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

a) Physical state:	liquid
Appearance:	homogenous, clear
b) Colour:	colourless
c) Odour:	non-perfumed
Odour threshold:	no data available
d) Melting point/freezing point:	no data for the mixture ethanol: -114.15°C, propan-2-ol: -89°C
e) Boiling point/ initial boiling point/range:	no data for the mixture ethanol: 78.3-79.6°C, propan-2-ol: 82°C
f) Flammability:	highly flammable liquid
g) Lower or upper explosion limit:	not data for the mixture ethyl alcohol: lower: 3.5 v/v%, upper: 15 v/v% propan-2-ol: lower: 2 v/v%, upper: 12 v/v%
h) Flash point:	<23°C (predicted value based on literature data)
i) Auto ignition temperature:	no data for the mixture 423°C (ethanol); 425°C (propan-2-ol)
j) Decomposition temperature:	no data
k) pH:	6.5 – 7.5 (20°C)
l) Kinematic viscosity:	not determined for the mixture 20°C: 1.2 mPaS (ethanol); 2.5 mPas (propan-2-ol)
m) Solubility:	indefinitely with water
n) Partition coefficient/logP <sub>ow</sub> :	not relevant, the product is a mixture -0.18 (ethanol); -0.16 (propan-2-ol)
o) Vapour pressure:	no data for the mixture propan-2-ol: 42 hPa (20°C); 60.2 hPa (25°C)
p) Density/relative density:	0.85-1.00 g/cm <sup>3</sup> (20°C)
q) Relative vapour density	no data for the mixture; ethanol: 0.79-0.8; 2-propanol: 1.05
r) Particle characteristics:	not relevant, the mixture is liquid

data for the components are from their SDS

### 9.2. Other information

9.2.1. Information with regard to physical hazard classes: classification into physical hazard class (Flam. Liq. 2) is necessary according to the high alcohol content, the mixture is not considered to be explosive and oxidizing.

9.2.2. Other safety characteristics: not known.



## SECTION 10: STABILITY AND REACTIVITY

- 10.1. Reactivity:** highly flammable liquid.
- 10.2. Chemical stability:** stable if it is handled, stored according to instructions.
- 10.3. Possibility of hazardous reactions:** alcohol vapour may form explosive alcohol – air mixtures.
- 10.4. Conditions to avoid:** heat, heating, open flame, spark, ignition sources, mixing with incompatible materials.
- 10.5. Incompatible materials:** strong acids, bases, strong oxidising agents, certain plastics, rubber. Do not mix with other household cleaning products and disinfecting agents.
- 10.6. Hazardous decomposition products:** not known at normal use, storage conditions, in fire carbon oxides are formed.

## 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 oral, dermal and inhalation ATE<sub>mix</sub> values.

**Skin corrosion/irritation:** based on composition the mixture should not be classified.

**Serious eye damage/eye irritation:** based on available data classification criteria are met, the mixture is eye irritant, due to high alcohol content.

**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 classes 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 is not necessary as isopropyl alcohol concentration is less than 20%.

**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:** massive and prolonged exposure of ethyl alcohol is suspected of damaging the unborn child and may cause harm to breast-fed children and cause damage to organs (liver). The mixture does not contain any endocrine disrupting properties based on the criteria set out in Reg. (EU) No 2017/2100 and Reg. (EU) No 2018/605.

## SECTION 12: ECOLOGICAL INFORMATION

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

It is not necessary to classify the product as environmentally hazardous mixture as none of the component is classified as hazardous substance to the environment.

**12.2. Persistence and degradability:** ethyl alcohol and isopropyl alcohol are readily biodegradable

**12.3. Bio accumulative potential:** not expected based on logP<sub>ow</sub> values of the alcohols.  
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:** components are not identified as endocrine disruptors, none of them are included in the endocrine disruptor and potential endocrine disruptor databases.

**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 (20 01 13\* or 14 06 03\*) may vary depending on place of use, circumstances of waste generation.

Properties of waste which render them hazardous: H3-A Highly flammable

## 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:** 1987

**14.2. UN proper shipping name:** ALCOHOLS N.O.S. (contains: KLINIKO-TEMPO hand & surface sanitizer)

**14.3. Transport hazard class(es):** 3

Classification code: F1, Hazard identification No: 33, Labels: 3

Transport category: 2 Tunnel restriction code: D/E

Limited quantities: 1 L, Excepted quantities: E2

IMDG: EmS: F-E, S-D

**14.4. Packing group:** II

**14.5. Environmental hazards:** no hazard

**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**

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

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

Commission Implementing Regulation (EU) 2015/407 of 11 March 2015 approving propan-2-ol as an active substance for use in biocidal products for product-types 1, 2 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 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 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:**

Eye Irrit.: eye irritation; Flam. Liq.: flammable liquids; STOT SE: specific target organ toxicity, single exposure

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

**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 hrs work shift

ATE<sub>mix</sub> Acute Toxicity Estimate for a mixture

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

ECHA European Chemicals Agency

EDS Endocrine Disruptor Substance

EWC European Waste Catalogue

GESTIS German data base for dangerous substances; [www.dguv.de/ifa/gestis-database](http://www.dguv.de/ifa/gestis-database)

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

logP<sub>o/w</sub> logarithm of n-octanol-water partition coefficient

PBT persistent, bio accumulative and toxic

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals, Reg. 1907/2006/EC

REACH Reg No: number of the REACH Registration

RID Dangerous Goods Regulations – International Carriage of Dangerous Goods by Rail

SVHC Substance of Very High Concern

vPvB very Persistent and very Bio accumulative

**History:** This safety data sheet (version: 2.0-EN) is issued 21 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.en/biztonsagiadatlapok/>