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, User category: professional

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

Microbiological spectrum: bactericidal, fungicidal and 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 Website: 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:	Flam. Liq. 2	Flammable liquids	2
Health hazard:	Eye Irrit. 2	Serious eye damage/eye irritation	2
Environmental hazard:	not classified		

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.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear eye protection - in case handling large quantities.
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.
P403+P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container in accordance with national regulations.

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, aqueous solution.

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
Ethyl alcohol CAS No: 64-17-5 EC No: 200-578-6 Index No: 603-002-005	55%	Flam. Liq. 2, H225; Eye Irrit. 2, H319
Isopropyl alcohol CAS No: 67-63-0 EC No: 200-661-7 Index No: 603-117-00-0	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: 3.3 v/v%, upper: 19 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 spillage area.
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.

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 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: TWA: 1920 mg/m^3 (EH40/2005, Fourth Edition 2020)
ÁK: 1900 mg/m^3, CK: 3800 mg/m^3 – 5/2020. (II.6.) ITM Hungarian decree

Isopropyl alcohol: TWA: 999 mg/m^3, STEL: 1250 mg/m^3 (EH40/2005, Fourth Edition 2020)
ÁK: 500 mg/m^3, CK: 1000 mg/m^3 – 5/2020. (II.6.) ITM Hungarian decree

GESTIS International 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
- **Eye/face protection:** not necessary
  Wear safety glasses complying with EN 166 standard if splashing is possible, in case of industrial operations, decontamination, handling large quantities, mixing and loading, etc.
- **Skin and hand protection:** not necessary.
  Wearing protective gloves is recommended in case of long-term work with the product, decontamination, handling large quantities, etc.
- **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:	colourless liquid, homogenous, clear
Odour:	alcohol
Odour threshold:	not determined
pH:	6.5 – 7.5 at 20°C
Melting point:	not relevant
Initial boiling point and range:	not determined
Flash point:	< 23°C, predicted
Evaporation rate:	no data
Flammability (solid, gas):	not relevant
Explosive properties:	alcohol vapours can form explosive alcohol-air mixtures
Explosive limits:	ethyl alcohol lower: 3.3 v/v%, upper: 19 v/v% isopropyl alcohol lower: 2 v/v%, upper: 12 v/v%
Vapour pressure:	no data
Vapour density:	no data
Density:	0.85 g/cm^3 at 20°C
Solubility:	unlimited in water
Partition coefficient (log$P_{o/w}$):	not relevant, it is a mixture – 0,32 (ethyl alcohol); 0,05 (isopropyl alcohol)
Auto-ignition temperature:	not data 363°C (ethyl alcohol); 456°C (isopropyl alcohol)
Decomposition temperature:	no data
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 class (Flam. Liq. 2) is necessary according to the high ethyl alcohol content.
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.

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_{mix} values.

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

Serious eye damage/eye irritation: based on available data classification criteria are met, the product is eye irritant, due to high ethyl 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: ethyl alcohol is suspected of damaging the unborn child and may cause harm to breast-fed children and cause damage to organs (liver).

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. Bioaccumulative potential: not expected based on $\log P_{o/w}$ values of the components.
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 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 (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: ethyl alcohol and isopropyl alcohol)

14.3. Transport hazard class(es): 3

14.4. Packing group: II

14.5. Environmental hazards: no

14.6. Special precautions for users:

ADR/RID: Special provisions: 274, 601, 640D

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

14.7. 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

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

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 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:
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 hours work shift
ATE_{mix}	Acute Toxicity Estimate
BCF	bioconcentration factor
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
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
$logP_{o/w}$	logarithm of n-octanol-water partition coefficient ($K_{o/w}$)
$M_{(acute)}$	M-factor of aquatic acute toxicity
$M_{(chronic)}$	M-factor of aquatic chronic toxicity
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: