

SAFETY DATA SHEET

(according to Regulation (EC) of the European Parliament and of the Council no. 1907/2006 (REACH))

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Product name:	Hand disinfection

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product identifier: **Hand disinfection**
Substance / mixture: mixture
Registration number REACH: Not applied for the mixture, intended for export

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Disinfectant
Unadvisable uses: Not known. The product may be used only for identified uses.

1.3. Details of the supplier of the safety data sheet

Name or trade name:	Pk CHEM, a.s.
Registered office/place of business:	Palackého 2312/54 695 01 Hodonin Czech Republic (EU)
Name or trade name of the competent person responsible for the Safety Data Sheet elaboration:	DEKRA CZ a.s. Consulting
Registered office/place of business:	Londýnské náměstí 856/2, 639 00 Brno Czech Republic
Telephone/fax:	+420 545 218 716
E-mail:	chemie.cz@dekra.com

1.4. Emergency telephone number

112 (24-hour service) – applicable to EU countries only

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to EC 1272/2008:

The mixture is classified as hazardous within the meaning of Regulation (EC) no. 1272/2008.

Flam. Liq. 2, H225

Eye Irrit. 2, H319


The full texts of all classifications, standard phrases regarding dangerous properties are given in Section 16.

The most important adverse physicochemical, human health and environmental effects

Highly flammable liquid and vapour. Causes serious eye irritation.

2.2. Label elements

Labelling according to EC 1272/2008

Product identifier/trade name:	Hand disinfection
Chemical name of the dangerous substances:	-
Danger symbol(s) and identification of danger:	
Signal Word:	Danger
Hazard Statement:	H225 Highly flammable liquid and vapour. H319 Causes serious eye irritation.
Precautionary Statement:	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 Keep container tightly closed.

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	P370 + P378 In case of fire: Use appropriate extinguishing media to extinguish. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 If eye irritation persists: Get medical advice/attention.
Supplemental information on the label:	-

For more information, see Section 16.

2.3. Other hazards

Does not contain PBT or vPvB substances.

SECTION 3: Composition/information on ingredients

3.1. Substances

The product is a mixture of substances.

3.2. Mixtures

Substance identifier	Concentration / concentration ranges (wt. %)	Index No. CAS No. EC No.	Classification according to EC 1272/2008
ethanol (reg. nr.: 01-2119457610-43)	≥ 60,0	603-002-00-5 64-17-5 200-578-6	Flam. Liq. 2, H225 Eye Irrit. 2, H319
isopropanol (reg. nr.: 01-2119457558-25)	< 2,0	603-117-00-0 67-63-0 200-661-7	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
butanon (reg. nr.: 01-2119457290-43)	< 2,0	606-002-00-3 78-93-3 201-159-0	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336

Full text of each relevant hazard statement described in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Depending on the victim's condition: get medical advice/attention.

<i>Inhalation:</i>	Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.
<i>Skin contact:</i>	In case of irritation or sensibilisation rinse with water. Take victim to a doctor if irritation persists.
<i>Eye contact:</i>	Rinse with lukewarm water for at least 15 minutes. Remove contact lenses, if present and easy to do. Do not apply neutralizing agents. Take victim to an ophthalmologist if irritation persists.
<i>Ingestion:</i>	Rinse mouth with water. Do not induce vomiting. Consult a doctor/medical service if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

After inhalation: No effects known.
After skin contact: No effects known.
After eye contact: May cause irritation: eye redness, itching, burning
After ingestion: Nausea.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Water spray. Polyvalent foam. BC powder. Carbon dioxide

Unsuitable extinguishing media: Full stream of water

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5.2. Special hazards arising from the substance or mixture

Upon combustion CO and CO₂ are formed. Do not inhale hazardous gases and combustion products. Cool containers exposed to fire with water spray.

5.3. Advice for firefighters

Protective clothing and self-contained breathing apparatus (EN 137) should be used. Use non-flammable protective clothing, personal protective equipment. Prevent leakage of used extinguishing agents into drains and water resources. Water used for extinguishing must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Observe safety rules. No smoking. Wear personal protection equipment (see section 8). Secure the area. Prevent entry by unauthorized persons.

Protective equipment for non-emergency personnel

See subsection 8.2

Protective equipment for emergency responders

Gloves. Protective clothing.

Suitable protective clothing: see subsection 8.2

6.2. Environmental precautions

Prevent material from entering surface waters, drains or sewers and soil. Prevent soil and water pollution. If leakage occurs, create a barrier. Prevent spreading in sewers. Inform the local authorities if the product leaks into surface waters, drains or soil, in large quantities.

6.3. Methods and material for containment and cleaning up

Prevent further leakage. Take up mechanically or use sorbent if possible and dispose the waste in compliance with Section 13. Clean contaminated surfaces with water. Hand over the waste to an authorized waste disposal company. Wash clothing and equipment after handling. Do not empty contaminated material into drains. Prevent leakage to the environment.

6.4. Reference to other sections

see also Sections 7, 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Provide adequate ventilation. Use explosion-proof equipment. Take action to prevent static discharges. Eliminate all ignition sources.

Observe normal hygiene standards. Avoid contact with eyes. Do not eat, drink or smoke when using the product. Take off immediately all contaminated clothing and wash it before reuse.

Avoid release to the environment. Keep container tightly closed. Damaged packaging should be mechanically collected and removed if that can be done without risk.

7.2. Conditions for safe storage, including any incompatibilities

Electrical installation and working materials must comply with the technical safety standards.

Store in a closed container. Store in a well-ventilated and dry place. Keep out of reach of children. Store upright. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Protect from direct sunlight.

7.3. Specific end use(s)

See subsection 1.2.

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limit values according to Directive 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU:

EINECS	CAS	Name of agent	Limit values				Notation
			Eight hours		Short-term		
			mg/m ³	ppm	mg/m ³	ppm	
201-159-0	78-93-3	butanone	600	200	900	300	-

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Observe normal hygiene standards. Provide adequate ventilation. Use explosionproof equipment. No eating, drinking and smoking at work. Keep away from food, drinks and animal feed.

8.2.2. Individual protection measures, such as personal protective equipment

Directive EU 89/656/EEC, Regulation (EU) 2016/425 introduces all personal protective equipment used.

Eye/face protection:	Eye protection not required in normal conditions. In case of emergency (leakage of large amount of mixture, damage to a large number of outer or inner packaging), if splashing into the eye may occur wear tightly fitting eye protection (EN 166) or face protection.
Skin protection:	Hand protection: In case of emergency wear protective gloves (EN 374). Check gloves for leaks before each use. The glove material has to be impermeable and resistant to the product. The resistance of the glove material has to be tested before use. Change protective gloves at the first signs of damage. Read the manufacturer's instructions for using gloves. The breakthrough time and thickness of the gloves are determined by the employer according to the specific workplace conditions. Other: In case of emergency wear suitable protective clothing (EN 943-1). Wash contaminated clothing before reuse.
Respiratory protection:	Wear gas mask with filter type A if conc. in air > exposure limit.

8.2.3. Environmental exposure controls

Prevent contamination of soil and water sources.

See Directives 80/68/EC, 90/656/EC, 91/692/EC, on waters, and Directive 96/62/EC, on air.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:	gel/liquid
Odour:	according to standard
Odour threshold:	data not available
pH:	data not available
Melting point/freezing point:	data not available
Initial boiling point and boiling range:	78,3 °C (ethanol)
Flash point:	12 °C (ethanol)
Evaporation rate:	data not available
Flammability (solid, gas):	data not available
Upper/lower flammability or explosive limits:	data not available
Vapour pressure:	data not available
Vapour density:	data not available
Relative density:	data not available
Solubility(ies):	water: soluble
Partition coefficient: n-octanol/water:	data not available
Auto-ignition temperature:	data not available

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Decomposition temperature:	data not available
Viscosity:	data not available
Explosive properties:	No chemical group associated with explosive properties
Oxidising properties:	No chemical group associated with oxidising properties

9.2. Other information

Data not available

SECTION 10: Stability and reactivity

10.1. Reactivity

May be ignited by sparks.

10.2. Chemical stability

The product is stable under normal conditions of use and storage.

10.3. Possibility of hazardous reactions

No possibility of hazardous reactions under normal conditions of use and storage.

10.4. Conditions to avoid

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

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

Upon combustion CO and CO₂ are formed.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological data have not been experimentally determined for mixture. Information about the possible effects of mixture is based on the knowledge of the individual components.

Acute toxicity

Based on available data, the classification criteria are not met.

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

Based on available data, the classification criteria are not met

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

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SECTION 12: Ecological information

Ecotoxicological data have not been experimentally determined for mixture. Information about the possible effects of mixtures based on the knowledge of the individual components.

12.1. Toxicity

Based on available data, the classification criteria are not met.

12.2. Persistence and degradability

Contains readily biodegradable components.

12.3. Bioaccumulative potential

Contains no bioaccumulative components.

12.4. Mobility in soil

No data available for the mixture.

12.5. Results of PBT and vPvB assessment

Does not contain component(s) that meet(s) the criteria of PBT and/or vPvB as listed in Annex XIII of Regulation (EC) No 1907/2006.

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Catalogue numbers of waste types are to be assigned by the user upon the product application used and other facts. Do not dispose of with municipal waste. Do not empty into drains.

Recommended waste code:

Waste code (Product)	16 05 08* discarded organic chemicals consisting of or containing hazardous substances
Waste code (Packing)	15 01 10* packaging containing residues of or contaminated by dangerous substances
Waste code (Absorption)	15 02 02* absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances

Recommended disposal method for legal persons and physical persons authorised to enterprise:

Place unused preparation and contaminated packaging into labelled waste collection containers, hand over labelled waste for disposal to a specialised company authorised to carry out such activities.

Recommended disposal method: recycling. If not possible, place the preparation into a dry, labelled container.

Legal regulations relating to waste

Directive 2008/98/EC of European Parliament and of the Council on waste and repealing certain Directives. European Parliament and Council Directive 94/62/EC on packaging and packaging waste. Commission Decision 2014/955/EU amending Decision 2000/532/EC on the list of waste pursuant to Directive 2008/98/EC of the European Parliament and of the Council.

SECTION 14: Transport information

The product is subject to ADR, RID, ADN, ICAO/IATA, IMDG provisions.

14.1. UN number	UN1170
14.2. UN proper shipping name	ETHANOL SOLUTION
14.3. Transport hazard class(es)	3
14.4. Packing group	II
14.5. Environmental hazards	No
14.6. Special precautions for user	see Sections 6, 7, 8 and 13
14.7. Transport in bulk according to Annex II of Marpol and the IBC Code	-

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SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

European regulations

Regulation (EC) of the European Parliament and of the Council no. 1907/2006 on Registration, evaluation, authorisation and restriction of chemicals (REACH)

Regulation (EC) of the European Parliament and of the Council no. 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP)

Commission Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values

Commission Directive 2006/15/EC establishing a second list of indicative occupational exposure limit values

Commission Directive 2009/161/EU establishing a third list of indicative occupational exposure limit values

Commission Directive (EU) 2017/164 establishing a fourth list of indicative occupational exposure limit values

15.2. Chemical safety assessment

A chemical safety assessment (CSR) has not been carried out for the mixture.

SECTION 16: Other information

Revision history:

Version	Date	Changes
1.0	14.02.2020	First issue acc. to Regulation (EC) of the European Parliament and of the Council no. 1907/2006, acc. and to Regulation (EC) of the European Parliament and of the Council no. 1272/2008

Legend to abbreviations and acronyms

M	Multiplying factor
SCL	Specific concentration limit
CAS	Chemical Abstract Service
EC	European Community number of a chemical for EINECS, ELINCS and NLP inventories
PBT	Persistent, Bioaccumulative and Toxic substances
vPvB	very Persistent and very Bioaccumulative substances
LD ₅₀	Lethal dose, 50 %
LC ₅₀	Lethal concentration, 50 %
EC ₅₀	Half maximal effective concentration
IC ₅₀	Half maximal inhibitory concentration
LDLo	Lowest lethal dose
NOEC	No observed effect concentration
SVHC	Substances of very high concern

Flam. Liq. 2	Flammable liquid, Category 2
Eye Irrit. 2	Eye irritation, Category 2
STOT SE 3	Specific target organ toxicity — single exposure, Category 3

List of relevant hazard statements used in the SDS

H225 Highly flammable liquid and vapour.

H319 Causes eye irritation.

H336 May cause drowsiness or dizziness.

Key literature references and sources for data

The information contained herein is based on our best knowledge and the present legislation. Further, the Safety Data Sheet has been elaborated on the basis of the original Safety Data Sheets of substances.

Methods used to classify a mixture

The mixture was evaluated and classified in accordance with Regulation (EC) no. 1272/2008 summation method (hazards to health and the environment) and on the basis of present data (for physical hazards).

Other information

For further information, see Section 1.3.

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Declaration

This Safety Data Sheet elaborated by DEKRA CZ a.s. represents an expert competent material complying with valid legal regulations. No modifications may be performed without the approval of the competent person. The product shall not be used for any other purpose than the intended one (see Section 1.2). Since specific conditions of the preparation usage are beyond the supplier's control, it is the user's responsibility to adapt specified notices for local laws and regulations. Safety information describes the product in terms of safety, and therefore may not be considered to be technical information about the product.