

Material Safety Date Sheet

1. Identification of the substance / preparation and company

1.1 Commercial product name

70% Isopropyl Alcohol

Use of the substance / preparation:

Cleansing and disinfection

1.2 Information on manufacturer / supplier

Heinz Herenz Medizinalbedarf GmbH

Rudorffweg 10, 21039 Hamburg / Germany

Tel.: 0049-40-739204-0

E-Mail: hhh@herenz.de

2. Composition / Information on ingredients

Chemical characterization (preparation):

70% Isopropyl Alcohol

Description:

Colorless clear liquid with typical alcoholic odor

<u>Substance</u>	<u>%</u>	<u>CAS-No.</u>
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Isopropyl Alcohol	70%	67-63-0
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3. Hazards identification

Hazard designation:

Flash point flammable liquid in Class 3.2

Specific hazard identification for man and environment:

-May cause dry skin, chapping and irritation. Inhalation may cause infection of the upper respiratory tract, drowsiness, tiredness, hypotension, imbalance, difficulty in breathing, and renal failure.

- Environmental hazard

Explosion hazard: flammable

4. First aid measures

Skin Contact: Wash affected areas thoroughly with soap and water. Obtain medical attention if allergy persists

Eye Contact: Immediately flood the eye with plenty of water. Obtain medical attention if irritation persists.

Inhalation: Remove from exposure to fresh air immediately. Obtain medical attention if difficulty in breathing persists.

Ingestion: Do not induce vomiting. Obtain medical attention immediately.

5. Fire-fighting measures

Extinguishing media:

Alcohol resistant foam, dry powder, carbon dioxide, sand

Fire-fighting precautions:

Remove containers to open space. Keep containers cool with water spray. Prevent chemicals from entering surface water and groundwater.

6. Accidental release measures

Personal precautions:

Do not breathe in the gas, or have direct contact with the spill. Keep good indoor ventilation.

Environmental precautions:

Do not allow release into the environment without treatment.

Methods for cleaning up / taking up:

Transfer into suitable containers for recovery or disposal. Take up with inert materials. Clean up contaminated areas. Discharge the washing liquid into the wastewater treatment tank.

7. Handling and storage

Storage Precautions:

Store in cool, well-ventilated warehouse, keeping the temperature between 15°C~25°C. Keep container tightly closed when not in use.

Handling and Storage Precautions:

Flammable liquid. Keep away from sparks, flames and high temperatures.

Other Precautions: Keep out of the reach of children.

8. Exposure controls and personal protection

Engineering Controls: Process enclosure, local exhaust.

Respiratory Protection: Wear respirators.

Eye Protection: Wear safety glasses.

Hand Protection: Wear latex gloves.

Body Protection: Wear anti-static garments.

Others: No smoking at working sites. Practice good personal hygiene. Avoid prolonged, repeated exposure.

9. Physical and chemical properties

9.1 Appearance

Form: liquid

Colour: clear

Odour: alcoholic

9.2 Safety relevant data

Melting Point (°C) -88.5

Boiling Point(°C) 80.3

Vapor Density (Water = 1) 0.783

Saturated Vapor Pressure (kPa) 4.40 (20°C)

Solubility: Soluble in most organic solvents such as water, alcohol, ether, benzene, chloroform

10. Stability and reactivity

Stability: Stable

Conditions to Avoid: Smoke and high temperatures

Materials to Avoid: Strong oxidizing agents, acids, acid anhydrides, halogens

Combustion/Decomposition Products: Carbon monoxide, carbon dioxide

11. Toxicological information

Acute toxicity: no data

Irritation:

Eyes (rabbit): 500mg, severe irritation

Dermal (rabbit): 15mg/24h, slight irritation

Subacute and chronic toxicity:

Oral (rat): 10.2g/kg. day, 12 weeks, weight loss, fatty liver

Mutagenicity:

Microbial mutagenicity: salmonella typhimurium, negative

Dominant lethal test:

Oral (mouse): 1-1.5g/kg. day, 2 weeks, positive

Reproductive toxicity:

Rat peritoneal minimum toxic concentration (TDLO): 7.5g/kg (9 days pregnant), teratogenic positive

12. Ecological information

Ecotoxicity: Long-term accumulation will pollute water.

Toxicity to fish: 8140mg/l/48h

Toxicity to daphnia: 9268-14221mg/l/48h

Toxicity to bacteria: 6500mg/l/16h

Biodegradation:

COD: 1.99g/g

BOD5: 0.93-1.67g/g

TOD: 2.10g/g

13. Disposal considerations

Waste Category: hazardous waste

Disposal Method:

Chemical residues are special waste. Dispose of in accordance with all applicable local and national regulations.

14. Transport information

Code of Dangerous Goods: 32061

Packing Mark: Flammable

UN Number: 1170

Packing Group: II

15. Regulatory information

*Regulations on the Control over Safety of Dangerous Chemicals and Regulations on the Safe Use of Chemicals at Workplace stipulate the safe use, production, storage, transport, and handling of hazardous chemicals. According to the *Classification and Labels of Dangerous Chemical Substances Commonly Used*, this substance is classified as flash point flammable liquid (Class 3.2).*

16. Other information