8/18/2020

SAFETY DATA SHEET

Issue date 28-Mar-2020

Revision Date 23-Apr-2020

Revision Number 4

1. IDENTIFICATION

1.1. Product identifier

Hand Sanitizer Isopropyl

Product Code(s)

FDA NDC Product Code: 74208-175

ALCOHOL Antiseptic 75%

Product is sold ready for use.

Topical Solution

Product name

Isopropyl Alcohol Antiseptic 75% Topical Solution

PROvided By TEA

Synonyms

respressive reservations and replace control

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Pure substance/mixture

Hand Sanitizer, Antiseptic hand rub Non-Sterile solution, IPA hand sanitizer Mixture

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

Recommended use

Hand Sanitizer

Uses advised against Human Consumption

1.3. Details of the supplier of the safety data sheet

Supplier

BE Industries, LLC 11490 Westheimer Rd, Suite 300 Houston, TX 77077 www.beindustries.co

For further information, please contact:

E-mail address

_ sales@beindustries.co

1.4. Emergency telephone number

Emergency telephone

+1 405-282-8510

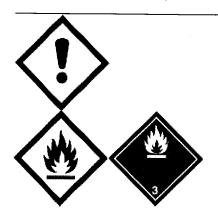
2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Physical hazards Flammable liquids	Category 2

2.2. Label elements



Signal word

Danger

Hazard statements

H319 - Causes serious eye irritation

H336 - May cause drowsiness or dizziness

H225 - Highly flammable liquid and vapor

Precautionary Statements - EU (§28, 1272/2008)

P370 + P378 - In case of fire: Use dry sodium carbonate to extinguish

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

2.3. Other hazards

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	EC No	CAS No	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH registration number
isopropyl alcohol	200-661-7	67-63-0	~75	Flam. Liq. 2 (H225) STOT SE 3 (H336) Eye Irrit. 2 (H319)	No data available
Water	231-791-2	7732-18-5	23-24	No data available	No data available
Glycerol	200-289-5	56-81-5	~1.45	No data available	No data available
Hydrogen Peroxide	•	7722-84-1	~0.13	No data available	No data available

Additional information

vol/vol percentages

*This product is manufactured under the FDA Temporary Policy for Preparation of Certain Alcohol-Based Hand Sanitizer Products During the Public Health Emergency (COVID-19) Guidance for Industry. This formulation is per Guide to Local Production: WHO-recommended Handrub Formulations and the FDA Guidance for Industry.

4. FIRST AID MEASURES

Description of first aid measures

General advice

Show this material safety data sheet to the doctor in attendance.

Eye contact

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin contact

None under normal use conditions. If severe irritation develops and persists or an allergic reaction occurs, rinse with soap and water and seek medical attention.

Ingestion

Do NOT induce vomiting. Call a physician or poison control center immediately. Rinse mouth. Never give anything by mouth to an unconscious person.

Inhalation

Remove to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.

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

7.4000.7

Main Symptoms

Causes central nervous system depression.

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

Notes to physician

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media

Extinguishing media - small fires. Dry chemical, CO₂, water spray or alcohol-resistant foam. Extinguishing media - large fires. Water spray, fog or alcohol-resistant foam.

Extinguishing media which must not be used for safety reasons

Do not use water jet.

5.2. Special hazards arising from the substance or mixture

Special Hazard

Extremely flammable. Will be easily ignited by heat, sparks or flames. Flash back possible over considerable distance. Vapors may form explosive mixtures with air. Cool containers with flooding quantities of water until well after fire is out.

5.3. Advice for firefighters

Special protective equipment for fire-fighters

As in any fire, wear self-contained breathing apparatus and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Keep people away from and upwind of spill/leak. Remove all sources of ignition. Stop leak if you can do it without risk. Ensure adequate ventilation. Use personal protective equipment as required. Do not touch or walk through spilled material. All equipment used when handling the product must be grounded.

See Section 12 for additional information.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system. Do not allow into any sewer, on the ground or into any body of water.

6.3. Methods and material for containment and cleaning up

Dike far ahead of liquid spill for later disposal.

Take precautionary measures against static discharges. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

6.4. Reference to other sections

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Ensure adequate ventilation. When transferring large amounts of the product, metal containers should be grounded. Wear personal protective equipment/face protection. Handle in accordance with good industrial hygiene and safety practice. Take precautionary measures against static discharges.

<u>7.2. Conditions for safe storage, including any incompatibilities</u>
Keep containers tightly closed in a cool, well-ventilated place. Keep away from heat and sources of ignition.

7.3. Specific end use(s)

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Isopropyl alcohol	STEL: 400 ppm	TWA: 400 ppm	IDLH: 2000 ppm
67-63-0	TWA: 200 ppm	TWA: 980 mg/m ³	TWA: 400 ppm
		(vacated) TWA: 400 ppm	TWA: 980 mg/m ³
		(vacated) TWA: 980 mg/m ³	STEL: 500 ppm
	1	(vacated) STEL: 500 ppm	STEL: 1225 mg/m ³
		(vacated) STEL: 1225 mg/m³	
Glycerol		TWA: 15 mg/m³ mist, total	-
56-81-5		particulate	
		TWA: 5 mg/m³ mist, respirable	•
		fraction	
		(vacated) TWA: 10 mg/m³ mist,	
		total particulate	
	1	(vacated) TWA: 5 mg/m³ mist,	
<u> </u>		respirable fraction	

NIOSH IDLH: Immediately Dangerous to Life or Health

Exposure limits

Chemical name	European Union	United Kingdom	France	Spain	Germany
Isopropyl alcohol	-	STEL: 500 ppm	STEL: 400 ppm	TWA: 200 ppm	TWA: 200 ppm
67-63-0		STEL: 1250 mg/m ³	STEL: 980 mg/m ³	TWA: 500 mg/m ³	TWA: 500 mg/m ³
		TWA: 400 ppm		STEL: 400 ppm	Ceiling / Peak: 400
		TWA: 999 mg/m ³		STEL: 1000 mg/m³	ppm
1					Ceiling / Peak: 1000
					mg/m³
Glycerol	-	STEL: 30 mg/m ³	TWA: 10 mg/m ³	TWA: 10 mg/m ³	TWA: 200 mg/m ³
56-81-5		TWA: 10 mg/m ³		-	Ceiling / Peak: 400
					mg/m³
Component	ltaly	Portugal	Netherlands	Finland	Denmark
Isopropyl alcohol		TWA: 200 ppm	TWA: 200 ppm 8hr,	TWA: 200 ppm	TWA: 200 ppm
67-63-0 (~75)	,	STEL: 400 ppm	500 mg/m³ 8hr	TWA: 500 mg/m ³	TWA: 490 mg/m ³
				STEL: 250 ppm	
			ļ <u></u> .	STEL: 620 mg/m ³	
Glycerol		TWA: 10 mg/m ³		TWA: 20 mg/m ³	-
56-81-5 (~1.45)			<u> </u>		
Chemical name	Austria	Switzerland	Poland	Norway	Ireland
Isopropyl alcohol	STEL 800 ppm	STEL: 400 ppm	TWA: 900 mg/m ³	TWA: 100 ppm	TWA: 200 ppm
67-63-0	STEL 2000 mg/m³	STEL: 1000 mg/m³	STEL: 1200 mg/m³	TWA: 245 mg/m ³	STEL: 400 ppm
	TWA: 200 ppm	TWA: 200 ppm		STEL: 125 ppm	Sk*
	TWA: 500 mg/m ³	TWA: 500 mg/m ³		STEL: 306.25 mg/m ³	
Glycerol		STEL: 100 mg/m³	TWA: 10 mg/m³	-	TWA: 10 mg/m³
56-81-5		TWA: 50 mg/m ³			STEL: 30 mg/m ³

Derived No Effect Level (DNEL)

No information available

Predicted No Effect Concentration (PNEC)

No information available

8.2. Exposure controls

Engineering Measures

Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment

Eye Protection None under normal use conditions. If splashes are likely to occur, wear: tightly fitting safety

goggles or face-shield, as appropriate.

Hand Protection None under normal use conditions. If submerged for long periods of time, wear butyl or

nitrile rubber gloves.

Skin and body protection Respiratory protection

None under normal use conditions. Wear suitable protective clothing.

None under normal use conditions. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.

Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local

regulations.

Hygiene measures Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or

smoke when using this product. Remove and wash contaminated clothing before re-use.

None known

None known

Environmental Exposure Controls The product should not

The product should not be allowed to enter drains, water courses or the soil.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical StateLiquidAppearanceclearColorcolorlessOdorAlcohol.

Odor Threshold No information available

Property Values Remarks • Method

pH 7.39 10.39 neat

Melting point / freezing point No data available None known

Boiling point / boiling range No data available None known
Flash point 19 °C CC (closed of

Flash point 19 °C CC (closed cup)
Evaporation rate No data available None known
Flammability (solid, gas) No data available None known
Flammability Limit in Air None known

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available limits

Vapor pressure
No data available
Vapor density
No data available

Relative density 0.830 - 0.890
Water solubility Soluble in water None known
Solubility in other solvents No data available None known
Partition coefficient: n-octanol/waterNo data available None known
Autoignition temperature No data available None known

Autoignition temperature No data available None known
Decomposition temperature No data available None known
Kinematic viscosity No data available None known
Viscosity, dynamic No data available None known

Explosive properties No information available Oxidizing properties No information available

9.2. Other information

Softening point
Molecular Weight
VOC Content (%)
Liquid Density

No information available
No information available
6.93-7.43 lbs/gal

Bulk density No information available

10. STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Heat (temperatures above flash point), sparks, ignition points, flames, static electricity. Strong oxidizing agents.

10.5. Incompatible materials

Strong oxidizing agents. Chlorine. Acids. Isocyanates. Acetaldehyde. Ethylene Oxide. Strong reducing agents. Strong bases.

Hazardous Decomposition Products

None under normal use conditions.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity

Product Information

Inhalation

None under normal use conditions. Close exposure to large open volumes or huffing vapors may cause adverse effects. Inhalation of vapors is irritating to the respiratory system, may cause throat pain and cough. May cause central nervous system depression with nausea, headache, dizziness, vomiting, and incoordination.

Eye contact

Avoid contact with eyes. Severely irritating to eyes.

Skin contact

None under normal use conditions. Substance may cause slight skin irritation.

Ingestion

None under normal use conditions. Not an expected route of exposure. Harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause adverse cardiac effects. May cause central nervous system depression. May

cause drowsiness or dizziness. May cause adverse kidney effects.

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Isopropyl alcohol	= 1870 mg/kg (Rat)	12800 mg/kg(Rat) 12870 mg/kg(Rabbit)	= 72600 mg/m³(Rat)4 h
Water	> 90 mL/kg (Rat)	8.00 mL/kg, 6280 mg/kg (Rabbit)	-
Glycerol	= 12600 mg/kg (Rat)	> 10 g/kg (Rabbit)	> 570 mg/m³(Rat)1 h

Chronic toxicity

Sensitization

No information available

Target organ effects

Central nervous system.

12. ECOLOGICAL INFORMATION

<u>12.1. Toxicity</u>

Ecotoxicity

The environmental impact of this product has not been fully investigated. Low order of toxicity based on components.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Isopropyl alcohol	1000: 72 h Desmodesmus subspicatus mg/L EC50 1000: 96 h Desmodesmus subspicatus mg/L EC50	9640: 96 h Pimephales promelas mg/L LC50 flow-through 11130: 96 h Pimephales promelas mg/L LC50 static 1400000: 96 h Lepomis macrochirus µg/L LC50		EC50: =13299mg/L (48h, Daphnia magna)

Isopropyl Alcohol Antiseptic 75% Topical Solution

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Glycerol	-	51 - 57: 96 h Oncorhynchus	-	EC50: >500mg/L (24h,
		mykiss mL/L LC50 static		Daphnia magna)

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

Chemical name	Partition coefficient
isopropyl alcohol	0.05
Glycerol	-1.76

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

No information available

12.6. Other adverse effects

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from Residues/Unused Products

Dispose of in accordance with local regulations.

Contaminated packaging

Do not reuse empty containers.

EWC Waste Disposal No

According to the European Waste Catalog, Waste Codes are not product specific, but application specific Waste codes should be assigned by the user based on the application for which the product was used

14. TRANSPORT INFORMATION

DOT

Proper shipping name

UN1219, Isopropanol Solutions, 3, PG II

Hazard class

UN/ID no

UN1219

Packing Group

PG II

15. REGULATORY INFORMATION

International Inventories

TSCA Complies

EINECS/ELINCS

DSL/NDSL Complies

PICCS ENCS IECSC AICS

KECL

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

AICS - Australian Inventory of Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

15.2. Chemical safety assessment Chemical Safety Report

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	CAS No	Weight-%	SARA 313 - Threshold Values %
Isopropyl alcohol	67-63-0	~75	1.0

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Canada

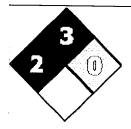
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

Chemical name	WHMIS Hazard Class
Isopropyl alcohol	1 %
	B2,D2B
Water	Uncontrolled product according to WHMIS classification criteria
Glycerol	Uncontrolled product according to WHMIS classification criteria

Chemical name	NPRI
Isopropyl alcohol	X

NPRI - National Pollutant Release Inventory

16. OTHER INFORMATION				
NFPA	Health hazards 2	Flammability 3	Stability 0	Physical and chemical
HMIS	Health hazards 2	Flammability 3	Physical hazards 0	properties - Personal protection -



Full text of H-Statements referred to under sections 2 and 3

H319 - Causes serious eye irritation

H336 - May cause drowsiness or dizziness

H225 - Highly flammable liquid and vapor

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend

Issue date

28-Mar-2020

Revision Date

23-Apr-2020

Revision Note

Not applicable.

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

US Only: This safety data sheet complies with the requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

Disclaimer

While the information and data contained herein are presented in good faith and believed to be reliable, nothing herein shall be deemed to constitute a warranty, express or implied, that the information or data is reliable, accurate, or complete or that the products or services described herein are merchantable or fit for a particular purpose or that said information, data, products, or services can be used without infringing the intellectual property rights of third parties. Individuals who receive the products, services, information or data relating to the products or services described herein, must use their own judgment in determining fitness for a particular purpose. Unless otherwise stated, the information or data contained herein relates to the products or services when not used in conjunction with any other products, services, or materials. All express and implied warranties of merchantability, fitness for a particular purpose, and non-infringement are hereby disclaimed. There shall be no liability for (i) any loss or damage that may occur from the use of the products or services described herein, including the use of the products or services in conjunction with other products, services, or materials; or (ii) any loss or damage that may occur from the reliance on the data or information described herein.

NDC 74208-175-02

Active Ingredient[s] Purpose Isopropyl alcohol 75%v/v. Antiseptic Use[s] Hand sanitizer to help reduce bacteria that potentially can cause disease. Use when soap and water are not available. Warnings For external use only. Flan-mable. Keep away from heat or flame Do not use • in children less than 2 months of age • on open skin wounds When using this product keep out of eyes, ears, and mouth. In case of contact with eyes, rinse eyes thoroughly with water. Stop use and ask a doctor if irritation or rash occurs. These may be signs of a serious condition. Keep out of reach of children. If swallowed, get medical help or contact a Polson Control Center right away.

Directions • Place enough product on hands to cover all surfaces. Rub hands together until dry.

 Supervise children under 6 years of age when using this product to avoid swallowing.

Other information

 Store between 15-30C (59-86F)
 Avoid freezing and excessive heat above 40C (104F)

Inactive Ingredients glycerin, hydrogen peroxide, purified water USP

Questions? To report adverse reactions, contact 580-658-6608.

Signal Word: DANGER Hazard Statements: H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness H225 Highly flammable liquid and vapor

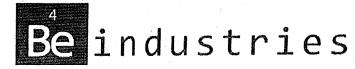




P370 + P378 in case of fire: Use dry sodium carbonate to extinguish P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

Emergency telephone 1-405-282-8510

DOT Proper Shipping Name: UN1219, Isopropanol Solution, 3, PG II



11490 Westheimer Rd., Houston, TX 77077 sales@beindustries.co www.beindustries.co

Hand Sanitizer

75% Topical Solution
Non-Sterile Solution

Net Contents: 4 x 1 Gal

Lot: 50020175-484

Manufactured by Flotek Chemistry, LLC 1004 S. Plainsman Rd Marlow, OK 73055 Phone (580) 658-6608