



FLOTEK
PROTEKOL
SAFETY DATA SHEET

Issue date 08-Mar-2021

Revision Date 08-Mar-2021

Revision Number 1

1. IDENTIFICATION

1.1. Product identifier

Product is sold ready for use.

Product name

Flotek Protekol™ Sanitizer Topical Solution (75% Isopropyl Alcohol)

Synonyms

Hand Sanitizer, Antiseptic hand rub Non-Sterile, IPA hand sanitizer, Isopropanol hand sanitizer

Pure substance/mixture

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

Flotek Chemistry, LLC
1004 S. Plainsman Road
Marlow, OK 73055
Phone +1 (580) 658-6608
Fax +1 (580) 658-3223

For further information, please contact:

Contact Point

www.flotekprotekol.com

E-mail address

information@flotekind.com

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

Additional information

vol/vol percentages

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

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.

7.2. Conditions for safe storage, including any incompatibilities

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 67-63-0	STEL: 400 ppm TWA: 200 ppm	TWA: 400 ppm TWA: 980 mg/m ³ (vacated) TWA: 400 ppm (vacated) TWA: 980 mg/m ³ (vacated) STEL: 500 ppm (vacated) STEL: 1225 mg/m ³	IDLH: 2000 ppm TWA: 400 ppm TWA: 980 mg/m ³ STEL: 500 ppm STEL: 1225 mg/m ³

NIOSH IDLH: Immediately Dangerous to Life or Health

Exposure limits

Chemical name	European Union	United Kingdom	France	Spain	Germany
Isopropyl alcohol 67-63-0	-	STEL: 500 ppm STEL: 1250 mg/m ³ TWA: 400 ppm TWA: 999 mg/m ³	STEL: 400 ppm STEL: 980 mg/m ³	TWA: 200 ppm TWA: 500 mg/m ³ STEL: 400 ppm STEL: 1000 mg/m ³	TWA: 200 ppm TWA: 500 mg/m ³ Ceiling / Peak: 400 ppm Ceiling / Peak: 1000 mg/m ³
Component	Italy	Portugal	Netherlands	Finland	Denmark
Isopropyl alcohol 67-63-0 (~75)		TWA: 200 ppm STEL: 400 ppm	TWA: 200 ppm 8hr, 500 mg/m ³ 8hr	TWA: 200 ppm TWA: 500 mg/m ³ STEL: 250 ppm STEL: 620 mg/m ³	TWA: 200 ppm TWA: 490 mg/m ³
Chemical name	Austria	Switzerland	Poland	Norway	Ireland
Isopropyl alcohol 67-63-0	STEL 800 ppm STEL 2000 mg/m ³ TWA: 200 ppm TWA: 500 mg/m ³	STEL: 400 ppm STEL: 1000 mg/m ³ TWA: 200 ppm TWA: 500 mg/m ³	TWA: 900 mg/m ³ STEL: 1200 mg/m ³	TWA: 100 ppm TWA: 245 mg/m ³ STEL: 125 ppm STEL: 306.25 mg/m ³	TWA: 200 ppm STEL: 400 ppm Sk*

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

None under normal use conditions. Wear suitable protective clothing.

Respiratory protection

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.

Environmental Exposure Controls

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 State	Liquid
Appearance	clear
Color	colorless
Odor	Citrus.
Odor Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	5.94 - 8.94	neat
Melting point / freezing point	< -28.89	None known
Boiling point / boiling range	No data available	None known
Flash point	21 °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 limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Relative density	0.827 - 0.887	
Water solubility	Soluble in water	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	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	No information available
Molecular Weight	No information available
VOC Content (%)	No information available
Liquid Density	6.90-7.41 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) 8.00 mL/kg, 6280 mg/kg (Rabbit)	= 72600 mg/m ³ (Rat) 4 h

Chronic toxicity

Sensitization

No information available

Target organ effects

Central nervous system.

12. ECOLOGICAL INFORMATION

12.1. Toxicity

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)

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

Chemical name	Partition coefficient
Isopropyl alcohol	0.05

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 Solution, 3, PG II
Hazard class	3
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

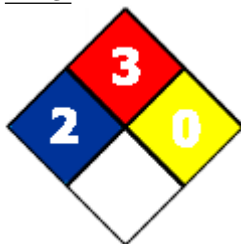
Chemical name	NPRI
Isopropyl alcohol	X

Legend

NPRI - National Pollutant Release Inventory

16. OTHER INFORMATION

<u>NFPA</u>	Health hazards 2	Flammability 3	Stability 0	Physical and chemical properties -
<u>HMIS</u>	Health hazards 2	Flammability 3	Physical hazards 0	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	08-Mar-2021
Revision Date	08-Mar-2021
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.

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