Issuing Date 10-SEP-2016

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY/UNDERTAKING

Product Name Isopropyl Alcohol

Product Code(s) NO.5

Unable to declare the manufacturer information (corporate policy)

Recommended Use For Further Manufacturing Use Only

Not for Human or Animal Drug Use

Alcohol for use in histological applications.

Synonyms ALCOOL ISOPROPILICO (ITALIAN) * ALCOOL ISOPROPYLIQUE (FRENCH) *

ALCOJEL * ALCOSOLVE * AVANTIN * AVANTINE * COMBI-SCHUTZ * DIMETHYLCARBINOL * HARTOSOL * 2-HYDROXYPROPANE * IMSOL A *

Revision Number 1

ISOHOL * ISOPROPANOL (DOT) * ISOPROPYL ALCOHOL

(ACGIH:DOT:OSHA) * ISO-PROPYLALKOHOL (GERMAN) * LUTOSOL *
1-METHYLETHANOL * 1-METHYLETHYL ALCOHOL * PETROHOL * PRO *
2-PROPANOL * I-PROPANOL (GERMAN) * N-PROPAN-2-OL * SEC-PROPYLALKOHOL * 2-PROPYLALKOHOL * 1-PROPYLALKOHOL * 1-PR

ALCOHOL * 2-PROPYL ALCOHOL * I-PROPYLALKOHOL(GERMAN) *
SPECTRAR * STERISOL HAND DISINFECTANT * TAKINEOCOL *UN1219

(DOT) *

2. HAZARDS IDENTIFICATION

GHS - Classification

Classification Flammable Liquid 2 Eye Irritant 2 Specific Target Organ Toxicity (Single) 3

Signal Word Danger







Hazard Statements H225 - Highly flammable liquid and vapor H316 - Causes mild skin irritation H319 -

Causes serious eye irritation H371 - May cause damage to organs

Precautionary Statements P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking P260

- Do not breathe dust/fume/gas/mist/vapors/spray P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	EC No.	REACH Reg. No.	CAS-No	Weight %	Classification
Isopropyl alcohol	200-661-7	Not available	67-63-0	99.9	F;R11
					Xi;R36
					R67

4. FIRST AID MEASURES

Eye Contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a

physician

Skin Contact Wash off immediately with soap and plenty of water removing all contaminated

clothes and shoes

Inhalation Move to fresh air. If breathing becomes difficult, give oxygen

Ingestion Clean mouth with water and afterwards drink plenty of water

Notes to Physician Treat symptomatically

5. FIRE-FIGHTING MEASURES

Flammable Properties Flammable liquid.

Flash Point 12 °C / 54 °F

Suitable Extinguishing Media Use water spray to cool fire-exposed containers

. Dry chemical, CO2, appropriate foam.

Hazardous Combustion Products Carbon oxides

Explosion Data

Sensitivity to Mechanical ImpactNot sensitiveSensitivity to Static DischargeNot sensitive

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus

pressure-demand, MSHA/NIOSH (approved or equivalent) and

full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Avoid contact with skin, eyes and clothing. Use personal protective equipment. Ensure

adequate ventilation

Methods for Containment Prevent further leakage or spillage if safe to do so

Methods for Cleaning Up Absorb on sand or vermiculite and place in closed containers for disposal. Use

non-sparking tools and equipment. Ventilate area and wash spill site after material pickup

is complete.

7. HANDLING AND STORAGE

Handling Handle in accordance with good industrial hygiene and safety practice. Keep

away from heat, sparks, and open flames.

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away

from heat, sparks, and open flames.

Incompatible Products Oxidizing agents. Acids. Anhydrides. Halogens. Aluminium.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Isopropyl alcohol	= 400 ppm STEL	TWA: 400 ppm	IDLH: 2000 ppm 10% LEL
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/m³	STEL: 1225 mg/m ³
		(vacated) STEL: 1225 mg/m ³	STEL: 500 ppm
		(vacated) STEL: 500 ppm	

Engineering Measures Showers

Eyewash stations Ventilation systems

Personal Protective Equipment

Eye/Face Protection Skin and Body Protection Respiratory Protection Tightly fitting safety goggles Wear protective gloves/clothing

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

Lower 2%

9. PHYSICAL AND CHEMICAL PROPERTIES

AppearanceClear and ColorlessOdorRubbing alcohol.

Odor Threshold
Decomposition Temperature °C
Freezing Point
Initial Boiling Point
No information available
No information available
No information available
No information available

Physical State Liquid

pH No data available
Flash Point 54 °F / 12 °C
Flammable Properties Flammable liquid.
Autoignition Temperature No data available
Boiling Point/Range 180 °F / 82 °C
Melting Point/Range -89 °C

Flammability Limits in Air(v/v) Upper 12.7%

Explosive Properties Oxidizing No information available **Properties Evaporation Rate** No information available

MMHG @ 37.8 C2.83 (BuAc = 1)Vapor DensityNo data availableSpecific GravityNo data available

Density 0.79 Solubility 2.1

Water Solubility
Partition Coefficient
(n-octanol/water)

No information available
Miscible in water
No data available

Viscosity

No information available

10. STABILITY AND REACTIVITY

Stability Stable under recommended storage conditions

Incompatible Products Oxidizing agents. Acids. Anhydrides. Halogens. Aluminium.

Conditions to Avoid Keep way from heat, sparks, and open flames

.

Hazardous Decomposition Products Carbon oxides

Hazardous Polymerization Hazardous polymerization does not occur

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information Irritating to eye, skin and respiratory system. Flammable liquid.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Isopropyl alcohol	4396 mg/kg (Rat)	12800 mg/kg (Rat) 12870 mg/kg (Rabbit)	72.6 mg/L (Rat)4 h

Chronic Toxicity

Chronic Toxicity No known effect based on information supplied

Target Organ Effects Nerves, Kidneys.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic organisms.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Microtox	Daphnia Magna (Water Flea)
Isopropyl alcohol	EC50 > 1000 mg/L 72 h EC50 > 1000 mg/L 96 h	LC50= 61200 mg/L Pimephales promelas 96 h LC50= 94900 mg/L Pimephales promelas 96 h LC50= 9640 mg/L Pimephales promelas 96 h	EC50 = 35390 mg/L 5 min	EC50 = 13299 mg/L 48 h

Chemical Name	Log Pow
Isopropyl alcohol	= 0.05 25 °C

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method Dispose of material in accordance with all federal, state, and local regulations

Contaminated Packaging Dispose of in accordance with all federal, state and local regulations

14. TRANSPORT INFORMATION

IATA

UN-No 1219 **Proper Shipping Name** Isopropanol

Hazard Class 3 **Packing Group** Ш

DOT

Proper Shipping Name Isopropanol

Hazard Class 3 **UN-No** 1219 **Packing Group** Ш

15. REGULATORY INFORMATION

REACH Title VII Restrictions No information available.

	Chemical Name	Dangerous Substances	Organic Solvents	Harmful Substances Whose Names Are to be Indicated on the Label	Pollution Release and Transfer Registry (Class II):	Pollution Release and Transfer Registry (Class I):	Poison and Deleterious Substances Control Law:
L	Isopropyl alcohol	Not applicable	Class 2	X	Not applicable	Not applicable	Not applicable

Component	ISHA - Harmful Substances Prohibited for Manufacturing, Importing, Transferring, or Supplying	ISHA - Harmful Substances Requiring Permission	Toxic Chemical Classification Listing (TCCL) - Toxic Chemicals	Toxic Release Inventory (TRI) - Group I	Toxic Release Inventory (TRI) - Group II
Isopropyl alcohol 67-63-0 (99.9%)	Not applicable	Not applicable	Not applicable	Not applicable	>= 1.0 %

International Inventories

TSCA Complies
EINECS/ELINCS Complies
ENCS Complies
IECSC Complies
KECL Complies
PICCS Complies
AICS Complies

U.S. 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	99.9	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard Yes
Chronic Health Hazard No
Fire Hazard Yes
Sudden Release of Pressure Hazard No
Reactive Hazard No

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Isopropyl alcohol 67-63-0 (99.9)				х

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.

CERCLA

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Isopropyl alcohol	X	X	X		X

International Regulations

Mexico - Grade

Chemical Name	Carcinogen Status	Exposure Limits
Isopropyl alcohol		Mexico: TWA= 400 ppm
		Mexico: TWA= 980 mg/m ³
		Mexico: STEL= 1225 mg/m ³
		Mexico: STEL= 500 ppm

Canada

WHMIS Hazard Class

D2B Toxic materials B2 Flammable liquid



Chemical Name	NPRI
Isopropyl alcohol	X

16. OTHER INFORMATION

Issuing Date 10-SEP-2016

Revision Date

Revision Note

No information available.

Recommended Restrictions No information available

Disclaimer

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of MSDS
