Isopropyl Alcohol

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

Trade name	Isopropyl Alcohol	
Synonyms	Dimethyl carbinol, Isopropanol	
Use	Industrial use	
Company	Sasol Chemicals (USA) LLC (an affiliate of Sasol Chemicals North America LLC)	
Address	12120 Wickchester Lane Houston TX 77079	
Telephone	CHEMTREC North America Transportation Emergency (24-hr)	(800) 424-9300
	CHEMTREC World Wide	(703) 527-3887
	Other Emergencies (24-hr)	(337) 494-5142
	SDS and Product Information (8:00am-4:30pm CST)	(281) 588-3491
	Health and Safety Information (7:30am-4:00pm CST)	(281) 588-3492
E-mail address	SasolElectronicSDS@us.sasol.com	

SECTION 2 HAZARDS IDENTIFICATION

GHS Hazards

Flammable liquids	Category 2
Eye irritation	Category 2A
Specific target organ toxicity - single exposure	Category 3 (Narcotic effects)

LABEL ELEMENTS

Hazard symbols



Signal word Danger

Hazard statements

H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

Precautionary statements

Prevention

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.
P280 Wear protective gloves/ eye protection/ face protection.
P264 Wash skin thoroughly after handling.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P271 Use only outdoors or in a well-ventilated area.

Response P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P370 + P378 In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide for extinction.
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.
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312 Call a POISON CENTER/doctor if you feel unwell.

Storage P403 + P405 + P235 Store locked up in a well-ventilated place. Keep cool.

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight percent
2-Propanol	67-63-0	100

See Section 8 for Exposure Guidelines and Section 15 for Regulatory Classifications.

SECTION 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 while removing all contaminated clothes and shoes. When symptoms persist or in all cases of doubt seek medical advice. Wash contaminated clothing before re-use.

Inhalation Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. In case of shortness of breath, give oxygen. Call a physician immediately.

Ingestion If swallowed, call a poison control centre or doctor immediately. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

SECTION 5 FIREFIGHTING MEASURES

FLAMMABLE PROPERTIES

Fire/explosion Vapours may form explosive mixture with air. Flash back possible over considerable distance. Use water spray to disperse the vapors. NFPA Class 1B flammable liquid.

Suitable Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

extinguishing media

Protective equipment and precautions for firefighters In the event of fire, wear self-contained breathing apparatus.

Further information Keep containers and surroundings cool with water spray. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Methods and materials for containment and cleaning up Evacuate personnel to safe areas. Remove all sources of ignition. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Do not flush into surface water or sanitary sewer system.

SECTION 7 HANDLING AND STORAGE

Safe handling advice Ensure all equipment is electrically grounded before beginning transfer operations. Keep away from heat and sources of ignition.

Storage/Transport pressure Ambient

Load/Unload temperature Ambient

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING MEASURES

Air contaminant levels should be controlled below the PEL or TLV for this product (see Exposure Guidelines). Ensure adequate ventilation, especially in confined areas. Use explosion-proof equipment.

PERSONAL PROTECTIVE EQUIPMENT

Eyes Chemical resistant goggles must be worn., Face-shield

Skin Wear suitable protective clothing, gloves and eye/face protection.

Inhalation Respiratory protection is normally not required except in emergencies or when conditions cause excessive airborne levels of mists or vapors. Use NIOSH approved respiratory protection.

EXPOSURE GUIDELINES

Components	Exposure limit(s)
2-Propanol	OSHA PEL 400 ppm 980 mg/m3 ACGIH TLV (8-hour) 200 ppm ACGIH STEL 400 ppm

PEL= Permissible Exposure Limits
TLV= Threshold Limit Value
EL= Excursion Limit

TWA= Time Weighted Average (8 hr.)
STEL= Short Term Exposure Limit (15 min.)
WEEL= Workplace Environmental Exposure Level

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	liquid;
Colour	Clear, colorless
Form	liquid
Odour	alcohol-like
Odour Threshold	no data available
Flash point	13 °C, 55 °F;
Flammability	Upper explosion limit: 19 %(V)
	Lower explosion limit: 3.3 %(V)
Boiling point/boiling range	82 °C, 180 °F;
Melting point/range	-92 °C, -134 °F;
Auto-ignition temperature	363 °C, 685 °F;
Decomposition temperature	no data available
Flammability (solid, gas)	no data available
Vapour pressure	no data available
Vapour density	no data available
Density	0.79 g/cm3 @ 20 °C, 68 °F;
Specific gravity	no data available
Water solubility	completely miscible
Viscosity	no data available
Viscosity, dynamic	no data available

pH	7
Evaporation rate	no data available
Partition coefficient: n-octanol/water	no data available
Volatile organic compounds (VOC) content	100 %

SECTION 10 STABILITY AND REACTIVITY

Reactivity	No decomposition if stored and applied as directed.
Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Heat, flames and sparks. Avoid temperatures above 35°C, direct sunlight and contact with sources of heat.
Hazardous decomposition products	Combustion products include carbon dioxide, carbon monoxide and possibly other unidentified organic compounds.
Materials to avoid	Strong acids and oxidizing agents Acid anhydrides Aluminium Halogenated compounds
Hazardous polymerisation	Vapours may form explosive mixture with air.

SECTION 11 TOXICOLOGICAL INFORMATION

Acute dermal toxicity	LD50 Rabbit: > 2,000 mg/kg(literature value)
Acute inhalation toxicity	LC50 Rat (8 hours): > 20 mg/l (literature value)
Acute oral toxicity	LD50 Rat: > 2,000 mg/kg (literature value)
Skin corrosion/irritation	(Rabbit) Not irritating, (literature value)
Eye damage/irritation	(Rabbit) irritating, (literature value)
Respiratory or skin sensitization	Guinea pig: not sensitizing; Buehler Test (literature value)
Germ cell mutagenicity	**Genotoxicity in vitro**:

Type: Ames test
System: Salmonella typhimurium; with and without metabolic activation
Result: In vitro tests did not show mutagenic effects
(literature value)

Genotoxicity in vivo:
no data available

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

Reproductive toxicity

Reproductive toxicity:
no data available

Assessment Reproductive toxicity:
no data available

Teratogenicity:
no data available

Assessment teratogenicity:
no data available

STOT - single exposure

The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.

STOT - repeated exposure

Rat; Oral; 90-day;
NOAEL: 1,730 mg/kg
LOAEL: 3,160 mg/kg
Based on available data, the classification criteria are not met.

Aspiration toxicity

no data available

Carcinogenicity

Assessment carcinogenicity:
Contains no ingredient listed as a carcinogen

SECTION 12 ECOLOGICAL INFORMATION

Toxicity to fish

LC50 (Pimephales promelas (fathead minnow)) 96 hours: > 100 mg/l; flow-through test
(literature value)

Toxicity to aquatic invertebrates

EC50 (Daphnia magna (Water flea)) 24 hours: > 100 mg/l; static test
(literature value)

Toxicity to algae

EC50 (Scenedesmus quadricauda (Green algae)) 7 d: > 100 mg/l; static test
(literature value)

Chronic toxicity to fish

no data available

Chronic toxicity to

no data available

aquatic invertebrates

Biodegradation Readily biodegradable

BOD5 (5 d): 53 %
(literature value)

Bioaccumulation No bioaccumulation is to be expected (log Pow <= 4).

Mobility in soil no data available

Other adverse effects This substance is not considered to be persistent, bioaccumulating and toxic (PBT).;

SECTION 13 DISPOSAL CONSIDERATIONS

Waste Code D001 - Ignitability (RQ 100 LB). This product has the RCRA characteristic of ignitability. Re-evaluation of the product may be required by the user at the time of disposal, since the product uses, transformations, mixtures, contamination, and spillage may change the classification.

Disposal methods Dispose of only in accordance with local, state, and federal regulations. Do not contaminate any lakes, streams, ponds, groundwater or soil.

Empty containers. Empty containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Empty drums should be completely drained, triple-rinsed, properly bunged and promptly returned to a drum reconditioner, or properly disposed.

SECTION 14 TRANSPORT INFORMATION

DOT UN 1219, Isopropanol, 3, II

IATA UN 1219, Isopropanol, 3, II

IMDG UN 1219, Isopropanol, 3, II

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Remarks no data available

SECTION 15 REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

OSHA Hazards (HCS 1994)

no data available

TSCA Inventory Listing

Components	CAS-No.
2-Propanol	67-63-0

SARA 302 Status

Components	CAS-No.	Weight percent

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 311/312 Classification

"Fire hazard", "Immediate (acute) health hazard"

SARA 313 Chemical

Components	CAS-No.	Weight percent
2-Propanol	67-63-0	100 %

US. EPA CERCLA Hazardous Substances (40 CFR 302)

Components	Reportable Quantity	Weight percent
none		

INTERNATIONAL REGULATIONS

WHMIS Classification

Class B, Division 2: Flammable liquid.
Class D, Division 2, Subdivision B: Toxic material.

European Union

Classification according to Regulation (EU) 1272/2008.

Flammable liquids, Category 2
Eye irritation, Category 2
Specific target organ toxicity - single exposure, Category 3 (Narcotic effects)

Australia. Inventory of Chemical Substances (AICS)	Listed
Japan. Inventory of Existing and New Chemical Substances (ENCS)	Listed
Japan. Industrial Safety & Health Law (ISHL) Inventory	Listed
Canada. Domestic Substances List (DSL) Inventory	Listed
Canadian Non-Domestic Substance Listing (NDSL)	Not listed
European Inventory of Existing Commercial Chemical Substances (EINECS) Listing	Listed
Philippines. Inventory of Chemicals / Chemical Substances (PICCS)	Listed
Korea. Existing Chemicals Inventory (KECI)	Listed

China. Inventory of Existing Chemical Substances (IECSC)	Listed
Mexico. National Inventory of Chemical Substances (INSQ)	Listed
New Zealand. Inventory of Chemicals (NZIoC)	Listed
Switzerland. Inventory of Notified New Substances (CHINV)	Listed
Taiwan. National Existing Chemical Inventory (NECI)	Listed

Please note: The names and CAS numbers which are used for this product in the stated inventories may deviate from the information which is listed in Section 3.

STATE REGULATIONS

California Prop. 65

Components	**CAS-No.**
none	

SECTION 16 OTHER INFORMATION

HAZARD RATINGS

	Health	Flammability	Physical Hazard/ Instability
HMIS®	2	3	0
NFPA	2	3	0

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