

**1. Identification**

Product identifier	Isopropanol - Isopropyl Alcohol	
Other means of identification		
CAS number	67-63-0	
Synonyms	Propan-2-ol	
Recommended use	Raw material for photochemicals, raw material for cleaning agents and disinfectants, process control substance, solvent, industrial use.	
Recommended restrictions	None known.	
Manufacturer/Importer/Supplier/Distributor information		
Manufacturer/Supplier	CMC Materials; 870 North Commons Drive; Aurora, IL 60504; United States	
Telephone	+1.630.375.6631	
Manufacturer/Supplier	CMC Materials; Amber Business Centre; Riddings Alfreton Derbyshire DE55 4DA; United Kingdom	
Telephone	+44 (0) 1773 844200	
E-mail	steve.grundy@cmcmaterials.com	
Manufacturer/Supplier	CMC Materials; 300 Throckmorton, Suite 1900; Fort Worth, Texas 76102; United States	
Telephone	+1.817.761.6100	
Manufacturer/Supplier	CMC Materials; Les Vieilles Hayes; 50620 Saint Fromond; France	
Telephone	+33 (0) 2 33 75 64 00	
E-mail	francesds@cmcmaterials.com	
Manufacturer/Supplier	CMC Materials; 9 Tuas View Lane; Singapore 638826	
Telephone	65.3163.6666	
Manufacturer/Supplier	CMC Materials; Via Umbria 4; 20098 San Giuliano Milanese (MI); Italy	
Telephone	+39 02 988381 / +44 (0) 1773 844200	
E-mail	steve.grundy@cmcmaterials.com	
Emergency phone number		
3E Global Incident Response Hotline		
USA	+1.866.519.4752	
International	+1.760.476.3962	
Access code	333035	
CHEMTREC	For Dangerous Goods Incidents ONLY (spill, leak, fire, exposure or accident), call CHEMTREC 24/7 at:	
Canada, USA	+1.800.424.9300	
International	+1.703.741.5970	

**2. Hazard(s) identification**

<b>Physical hazards</b>	Flammable liquids	Category 2
<b>Health hazards</b>	Serious eye damage/eye irritation	Category 2A
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
<b>OSHA defined hazards</b>	Not classified.	

## Label elements



**Signal word** Danger

**Hazard statement** Highly flammable liquid and vapor. Causes serious eye irritation. May cause drowsiness or dizziness.

### Precautionary statement

#### Prevention

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing mist/vapors. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/eye protection/face protection.

#### Response

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor if you feel unwell. If eye irritation persists: Get medical advice/attention. In case of fire: Use water fog, alcohol resistant foam, dry chemical powder, carbon dioxide to extinguish.

#### Storage

Keep cool. Store in a well-ventilated place. Keep container tightly closed. Store locked up.

#### Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

**Hazard(s) not otherwise classified (HNOC)** None known.

**Supplemental information** None.

## 3. Composition/information on ingredients

### Substances

Chemical name	Common name and synonyms	CAS number	%
Propan-2-ol	Isopropyl alcohol (isopropanol)	67-63-0	100

**Composition comments** All concentrations are in percent by weight unless otherwise indicated.

## 4. First-aid measures

### Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.

### Skin contact

Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical attention if irritation develops and persists.

### Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

### Ingestion

Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical attention if symptoms occur. If ingestion of a large amount occurs, seek medical attention.

### Most important symptoms/effects, acute and delayed

May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

### Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

### General information

Take off all contaminated clothing immediately. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

## 5. Fire-fighting measures

### Suitable extinguishing media

Water fog. Alcohol resistant foam. Dry chemical powder. Carbon dioxide (CO<sub>2</sub>).

### Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

<b>Specific hazards arising from the chemical</b>	Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed. Combustion products may include: carbon oxides.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk. Cool containers exposed to flames with water.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	Highly flammable liquid and vapor.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist/vapors. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools.  Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.  Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Clean surface thoroughly to remove residual contamination.  Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
<b>Environmental precautions</b>	Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. When using do not smoke. Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Avoid breathing mist/vapors. Avoid contact with eyes. Avoid prolonged exposure. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
<b>Conditions for safe storage, including any incompatibilities</b>	Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a cool, dry place out of direct sunlight. Store in tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Material	Type	Value
Propan-2-ol (CAS 67-63-0)	PEL	980 mg/m3 400 ppm

#### US. ACGIH Threshold Limit Values

Material	Type	Value
Propan-2-ol (CAS 67-63-0)	STEL	400 ppm
	TWA	200 ppm

#### US. NIOSH: Pocket Guide to Chemical Hazards

Material	Type	Value
Propan-2-ol (CAS 67-63-0)	STEL	1225 mg/m3 500 ppm
	TWA	980 mg/m3 400 ppm

**Biological limit values****ACGIH Biological Exposure Indices**

Material	Value	Determinant	Specimen	Sampling Time
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Propan-2-ol (CAS 67-63-0)	40 mg/l	Acetone	Urine	*
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\* - For sampling details, please see the source document.

**Appropriate engineering controls**

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station and safety shower.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin protection**

**Hand protection** Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

**Skin protection**

**Other** Wear appropriate chemical resistant clothing.

**Respiratory protection**

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Wear NIOSH approved respirator appropriate for airborne exposure at the point of use. Appropriate respirator selection should be made by a qualified professional.

**Thermal hazards**

Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations**

When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**9. Physical and chemical properties****Appearance**

**Physical state** Liquid.

**Form** Liquid.

**Color** Colorless.

**Odor** Alcoholic.

**Odor threshold** Not available.

**pH** Not applicable.

**Melting point/freezing point** -127.3 °F (-88.5 °C)

**Initial boiling point and boiling range** 180.5 °F (82.5 °C) 1013.1 hPa

**Flash point** 53.6 °F (12.0 °C) Closed Cup

**Evaporation rate** 1.7

**Flammability (solid, gas)** Not applicable.

**Upper/lower flammability or explosive limits**

**Flammability limit - lower (%)** 2.3

**Flammability limit - upper (%)** 12.7

**Vapor density** 2.1

**Relative density** 0.785 (water=1)

**Solubility(ies)**

**Solubility (water)** Miscible with water.

**Partition coefficient (n-octanol/water)** 0.05

**Auto-ignition temperature** 750.2 °F (399 °C)

**Decomposition temperature** Not available.

**Viscosity** Not available.

## Other information

Density	0.79 g/cm <sup>3</sup>
Dynamic viscosity	0.58 mPa.s (167 °F (75 °C))
Explosive properties	Not explosive.
Heat of combustion (NFPA 30B)	27.4 kJ/g
Kinematic viscosity	0.7338 mm <sup>2</sup> /s
Molecular formula	C3-H8-O
Molecular weight	60.1 g/mol
Oxidizing properties	Not oxidizing.
Surface tension	20.93 mN/m (77 °F (25 °C))
VOC	100 % EPA estimated

## 10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Contact with incompatible materials.
Incompatible materials	Acids. Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

## 11. Toxicological information

### Information on likely routes of exposure

Inhalation	May cause drowsiness and dizziness. Prolonged inhalation may be harmful.
Skin contact	Prolonged skin contact may cause temporary irritation.
Eye contact	Causes serious eye irritation.
Ingestion	May cause discomfort if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics	May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Aspiration may cause pulmonary edema and pneumonitis.
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### Information on toxicological effects

Acute toxicity	Not expected to be acutely toxic.
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Product	Species	Test Results
Propan-2-ol (CAS 67-63-0)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	16.4 ml/kg, 24 Hours
Inhalation		
Vapor		
LC50	Rat	> 10000 ppm, 6 Hours
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.	
Serious eye damage/eye irritation	Causes serious eye irritation.	
Respiratory or skin sensitization		
Respiratory sensitization	Not a respiratory sensitizer.	
Skin sensitization	This product is not expected to cause skin sensitization.	
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity	Not classifiable as to carcinogenicity to humans.	

## IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

## NTP Report on Carcinogens

Not listed.

## OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

<b>Reproductive toxicity</b>	This product is not expected to cause reproductive or developmental effects.
<b>Specific target organ toxicity - single exposure</b>	May cause drowsiness and dizziness.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not classified, however droplets of the product may be aspirated into the lungs through ingestion or vomiting and may cause a serious chemical pneumonia.
<b>Chronic effects</b>	Prolonged inhalation may be harmful.

## 12. Ecological information

<b>Ecotoxicity</b>	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
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Product	Species	Test Results
Propan-2-ol (CAS 67-63-0)		
<b>Aquatic</b>		
<i>Acute</i>		
Crustacea	LC50	Daphnia magna > 10000 mg/l, 24 hours
Fish	LC50	Pimephales promelas 9640 mg/l, 96 hours

<b>Persistence and degradability</b>	Readily biodegradable.
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### Bioaccumulative potential

#### Partition coefficient n-octanol / water (log Kow)

0.05

<b>Mobility in soil</b>	This product is miscible in water. Expected to be mobile in soil.
<b>Other adverse effects</b>	The product is a volatile organic compound which has a photochemical ozone creation potential.

## 13. Disposal considerations

<b>Disposal instructions</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.
<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	Dispose in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
<b>Contaminated packaging</b>	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

## 14. Transport information

### DOT

<b>UN number</b>	UN1219
<b>UN proper shipping name</b>	Isopropanol
<b>Transport hazard class(es)</b>	
<b>Class</b>	3
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	3
<b>Packing group</b>	II
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.
<b>Special provisions</b>	IB2, T4, TP1
<b>Packaging exceptions</b>	4b, 150
<b>Packaging non bulk</b>	202

Packaging bulk 242  
ERG number 129

#### IATA

UN number UN1219  
UN proper shipping name Isopropanol  
Transport hazard class(es)  
Class 3  
Subsidiary risk -  
Packing group II  
Environmental hazards No  
ERG Code 3L  
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

#### IMDG

UN number UN1219  
UN proper shipping name ISOPROPANOL  
Transport hazard class(es)  
Class 3  
Subsidiary risk -  
Packing group II  
Environmental hazards  
Marine pollutant No  
EmS F-E, S-D  
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.  
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable. However, this product is a liquid and if transported in bulk covered under MARPOL 73/78, Annex I.

## 15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

#### CERCLA Hazardous Substance List (40 CFR 302.4)

Propan-2-ol (CAS 67-63-0) Listed.

#### SARA 304 Emergency release notification

Not regulated.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Toxic Substances Control Act (TSCA) This substance is on the TSCA 8(b) inventory and is designated "active".

#### Superfund Amendments and Reauthorization Act of 1986 (SARA)

##### SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

Classified hazard categories Flammable (gases, aerosols, liquids, or solids)  
Serious eye damage or eye irritation  
Specific target organ toxicity (single or repeated exposure)

#### SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Propan-2-ol	67-63-0	100

#### Other federal regulations

##### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

##### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

**FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace**

Propan-2-ol (CAS 67-63-0)

Low priority

**US state regulations**

**US. Massachusetts RTK - Substance List**

Propan-2-ol (CAS 67-63-0)

**US. New Jersey Worker and Community Right-to-Know Act**

Propan-2-ol (CAS 67-63-0)

**US. Pennsylvania Worker and Community Right-to-Know Law**

Propan-2-ol (CAS 67-63-0)

**US. Rhode Island RTK**

Propan-2-ol (CAS 67-63-0)

**California Proposition 65**

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**

Propan-2-ol (CAS 67-63-0)

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Industrial Chemicals (AICIS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

**Issue date** 30-November-2012

**Revision date** 28-April-2021

**Version #** 04

**NFPA ratings**



**List of abbreviations** ECHA: European Chemical Agency.

**Disclaimer** CMC Materials cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.