

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Issue date: 27/10/2016 Revision date: 16/03/2021 Supersedes version of: 27/10/2016 Version: 2.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Substance
Substance name : Isopropanol
IUPAC name : propan-2-ol
EC-No. : 200-661-7
CAS-No. : 67-63-0

REACH registration No : 01-2119457558-25

Product code : ISOPGEN

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

1.2.1. Relevant identified uses

Main use category : Industrial use

Use of the substance/mixture : Raw material for photo-chemicals, Raw material for cleaning agent, Raw material for

disinfectants, Process regulator or aid, solvent

Use of the substance/mixture : Solvents

1.2.2. Uses advised against

Restrictions on use : Any other use not identified.

1.3. Details of the supplier of the safety data sheet

J.V. Barrett & Co. Ltd St Ivel Way Warmley BS30 8TY Bristol - United Kingdom T +44 (0)1179 60 00 60

sales@barrettine.co.uk - www.barrettine.co.uk

1.4. Emergency telephone number

Emergency number : +44 (0) 1179 600060 (Office hours only 8am - 5pm Mon- Thurs. 8 am - 4.30 pm Fri.)

+44 (0) 1270 502891 (Out of hours emergency number)

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	0344 892 0111	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids, Category 2 H225
Serious eye damage/eye irritation, Category 2 H319
Specific target organ toxicity — Single exposure, Category 3, Narcosis H336

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

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

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2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)





GHS02

GHS07

Signal word (CLP)

: Danger

Hazard statements (CLP) : H225 - Highly flammable liquid and vapour.

H319 - Causes serious eye irritation.

H336 - May cause drowsiness or dizziness.

Precautionary statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking.

P233 - Keep container tightly closed.

P261 - Avoid breathing mist, vapours, spray.

P271 - Use only outdoors or in a well-ventilated area.

P280 - Wear protective gloves, protective clothing, eye protection, face protection.

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.

P370+P378 - In case of fire: Use alcohol resistant foam, carbon dioxide (CO2), dry

extinguishing powder, dry sand to extinguish.

P403+P235 - Store in a well-ventilated place. Keep cool.

P405 - Store locked up.

P501 - Dispose of contents and container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type Mono-constituent Name Isopropanol CAS-No. 67-63-0 EC-No. 200-661-7

Name	Product identifier	Classification according to Regulation (EC) No. 1272/2008 [CLP]
isopropanol	CAS-No.: 67-63-0 EC-No.: 200-661-7 EC Index-No.: 603-117-00-0 REACH-no: 01-2119457558-25	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336

Full text of H-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Call a poison center or a doctor if you feel unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

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First-aid measures after skin contact : If skin irritation occurs: Get medical advice/attention. Do not remove clothing if it sticks to

the skin. After contact with skin, take off immediately all contaminated clothing, and wash

immediately with plenty of water.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing. Get medical advice/attention.

First-aid measures after ingestion : Get medical advice/attention. Rinse mouth. Do not induce vomiting.

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

Symptoms/effects : May cause drowsiness or dizziness.

Symptoms/effects after inhalation : May cause headache, nausea and irritation of respiratory tract.

Symptoms/effects after skin contact : May cause an allergic skin reaction.

Symptoms/effects after eye contact : Causes serious eye damage. redness, itching, tears. Risk of serious damage to eyes.

Symptoms/effects after ingestion : Ingestion may cause nausea and vomiting.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Highly flammable liquid and vapour. Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained

breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Do not handle until all safety precautions have been read and understood. Eliminate every

possible source of ignition. Evacuate area. No flames, no sparks. Eliminate all sources of

ignition. Use special care to avoid static electric charges.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid breathing mist,

vapours, spray. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Absorb spilled material with sand or earth. Collect spillage.

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or

public waters.

Other information : Dispose of materials or solid residues at an authorised site.

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6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed

: Handle empty containers with care because residual vapours are flammable.

Precautions for safe handling

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid breathing mist, vapours,

spray. Avoid contact with skin and eyes.

Hygiene measures

Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures

: Ground/bond container and receiving equipment. Keep in a cool, well-ventilated place away from heat. Store locked up.

Storage conditions

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

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. National occupational exposure and biological limit values

isopropanol (67-63-0)				
United Kingdom - Occupational Exposure Limits				
Local name	Propan-2-ol			
WEL TWA (OEL TWA) [1]	999 mg/m³			
WEL TWA (OEL TWA) [2]	400 ppm			
WEL STEL (OEL STEL)	1250 mg/m³			
WEL STEL (OEL STEL) [ppm]	500 ppm			
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE			

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

Isopropanol (67-63-0)				
DNEL/DMEL (Workers)				
Long-term - systemic effects, dermal	888 mg/kg bodyweight/day			
Long-term - systemic effects, inhalation	500 mg/m³			

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Isopropanol (67-63-0)				
DNEL/DMEL (General population)				
26 mg/kg bodyweight/day				
89 mg/m³				
319 mg/kg bodyweight/day				
140.9 mg/l				
140.9 mg/l				
140.9 mg/l				
PNEC (Sediment)				
552 mg/kg dwt				
552 mg/kg dwt				
28 mg/kg dwt				
PNEC (Oral)				
160 mg/kg food				
PNEC (STP)				
2251 mg/l				

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment:

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Personal protective equipment symbol(s):







8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

Eye protection					
Туре	Field of application	Characteristics	Standard		
Safety glasses, Safety goggles	Droplet		EN 166		

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

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Hand protection					
Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Reusable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	≥0.35		EN 374-2, EN 374-3
Reusable gloves	Butyl rubber	6 (> 480 minutes)	≥0.5		EN 374-2, EN 374-3

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Respiratory protection				
Device	Filter type	Condition	Standard	
Reusable half mask, Full face mask	Type P2	Vapour protection	EN 14387	

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid 60.11 g/mol Molecular mass Colour Colourless. Odour characteristic Odour threshold : No data available : No data available Relative evaporation rate (butylacetate=1) : No data available : -89 °C Not applicable Melting point Freezing point : No data available

Boiling point: 82 °CFlash point: 12 °CAuto-ignition temperature: 425

Decomposition temperature : No data available Flammability (solid, gas) : Not applicable Vapour pressure : 42 hPa @ 20 oC Relative vapour density at 20 °C : No data available

Relative density : 0.8 Type: 'relative density'

Density : 0.79 g/cm³ Type: 'density' Temp.: 20 °C

Solubility : completely miscible.

Partition coefficient n-octanol/water (Log Pow) : No data available

Viscosity, kinematic : 3.165 mm²/s

Viscosity, dynamic : 2.5 mPa·s @ 20 oC

Explosive properties : No data available

Oxidising properties : No data available

Lower explosive limit (LEL) : 2 vol % Upper explosive limit (UEL) : 12 vol %

9.2. Other information

No additional information available

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SECTION 10: Stability and reactivity

10.1. Reactivity

Highly flammable liquid and vapour.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

Oxidizing agent. Strong acids.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11	1	Inf	formatio	n on	toxico	logical	offects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

LD50 oral rat 5840 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)

isopropanol (67-63-0)

LD50 oral rat 5840 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)

LD50 dermal rabbit 16400 mg/kg Source: ECHA

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified

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IARC group 3 - Not classifiable

Reproductive toxicity : Not classified

STOT-single exposure : May cause drowsiness or dizziness.

isopropanol (67-63-0)

STOT-single exposure May cause drowsiness or dizziness.

STOT-repeated exposure : Not classified Aspiration hazard : Not classified

Isopropanol (67-63-0)

Viscosity, kinematic 3.165 mm²/s

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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse

effects in the environment.

Hazardous to the aquatic environment, short-term

(acute)

: Not classified

Hazardous to the aquatic environment, long-term

(chronic)

: Not classified

Not rapidly degradable

Not rapidly degradable				
Isopropanol (67-63-0)				
LC50 - Fish [1]	10000 mg/l Test organisms (species): Pimephales promelas			
LC50 - Fish [2]	9640 mg/l Test organisms (species): Pimephales promelas			
isopropanol (67-63-0)				
LC50 - Fish [1]	10000 mg/l Test organisms (species): Pimephales promelas			
LC50 - Fish [2]	9640 mg/l Test organisms (species): Pimephales promelas			

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

isopropanol (67-63-0)

Partition coefficient n-octanol/water (Log Pow) 0.05 Source: ICSC

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

Component	
isopropanol (67-63-0)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

Additional information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Additional information : Flammable vapours may accumulate in the container.

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HP Code

- : HP3 "Flammable:"
 - flammable liquid waste: liquid waste having a flash point below 60 °C or waste gas oil, diesel and light heating oils having a flash point > 55 °C and ≤ 75 °C;
 - flammable pyrophoric liquid and solid waste: solid or liquid waste which, even in small quantities, is liable to ignite within five minutes after coming into contact with air;
 - flammable solid waste: solid waste which is readily combustible or may cause or contribute to fire through friction;
 - flammable gaseous waste: gaseous waste which is flammable in air at 20 $^{\circ}$ C and a standard pressure of 101.3 kPa;
 - water reactive waste: waste which, in contact with water, emits flammable gases in dangerous quantities;
 - other flammable waste: flammable aerosols, flammable self-heating waste, flammable organic peroxides and flammable self-reactive waste.

 $\mbox{HP4}$ - "Irritant — skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
UN 1219	UN 1219	UN 1219	UN 1219	UN 1219
14.2. UN proper shippin	g name			
ISOPROPANOL (ISOPROPYL ALCOHOL)	ISOPROPANOL (ISOPROPYL ALCOHOL)	Isopropanol	ISOPROPANOL (ISOPROPYL ALCOHOL)	ISOPROPANOL (ISOPROPYL ALCOHOL)
Transport document descr	iption			
UN 1219 ISOPROPANOL (ISOPROPYL ALCOHOL), 3, II, (D/E)	UN 1219 ISOPROPANOL (ISOPROPYL ALCOHOL), 3, II (12°C c.c.)	UN 1219 Isopropanol, 3, II	UN 1219 ISOPROPANOL (ISOPROPYL ALCOHOL), 3, II	UN 1219 ISOPROPANOL (ISOPROPYL ALCOHOL). 3, II
14.3. Transport hazard o	class(es)			
3	3	3	3	3
3	3	3	3	3
14.4. Packing group				
II	II	II	II	II
14.5. Environmental haz	ards			
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No

14.6. Special precautions for user

No supplementary information available

Overland transport

Classification code (ADR) : F1
Special provisions (ADR) : 601
Limited quantities (ADR) : 11
Excepted quantities (ADR) : E2

Packing instructions (ADR) : P001, IBC02, R001

Mixed packing provisions (ADR) : MP19
Portable tank and bulk container instructions (ADR) : T4

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Portable tank and bulk container special provisions : TP1

(ADR)

Tank code (ADR) : LGBF
Vehicle for tank carriage : FL
Transport category (ADR) : 2
Special provisions for carriage - Operation (ADR) : S2, S20
Hazard identification number (Kemler No.) : 33

Orange plates :

33 1219

Tunnel restriction code (ADR) : D/E EAC code : •2YE

Transport by sea

Limited quantities (IMDG) : 1L Excepted quantities (IMDG) : E2 Packing instructions (IMDG) : P001 IBC packing instructions (IMDG) : IBC02 Tank instructions (IMDG) : T4 Tank special provisions (IMDG) : TP1 : F-E EmS-No. (Fire) : S-D EmS-No. (Spillage) Stowage category (IMDG) : B Flash point (IMDG) : 12°C c.c.

Properties and observations (IMDG) : Colourless, mobile liquid. Flashpoint: 12°C c.c. Explosive limits: 2% to 12% Miscible with

water.

Air transport

PCA Excepted quantities (IATA) : E2 PCA Limited quantities (IATA) : Y341 PCA limited quantity max net quantity (IATA) : 1L PCA packing instructions (IATA) : 353 PCA max net quantity (IATA) : 5L : 364 CAO packing instructions (IATA) CAO max net quantity (IATA) : 60L Special provisions (IATA) : A180 ERG code (IATA) : 3L

Inland waterway transport

Classification code (ADN) : F1

Special provisions (ADN) : 601

Limited quantities (ADN) : 1 L

Excepted quantities (ADN) : E2

Equipment required (ADN) : PP, EX, A

Ventilation (ADN) : VE01

Number of blue cones/lights (ADN) : 1

Rail transport

Classification code (RID) : F1
Special provisions (RID) : 601
Limited quantities (RID) : 1L
Excepted quantities (RID) : E2

Packing instructions (RID) : P001, IBC02, R001

Mixed packing provisions (RID) : MP19
Portable tank and bulk container instructions (RID) : T4
Portable tank and bulk container special provisions : TP1

(RID)

Tank codes for RID tanks (RID): LGBFTransport category (RID): 2Colis express (express parcels) (RID): CE7Hazard identification number (RID): 33

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14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Isopropanol is not on the REACH Candidate List

Isopropanol is not on the REACH Annex XIV List

Organic solvent

Isopropanol is not subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 july 2012 concerning the export and import of hazardous chemicals.

Isopropanol is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms			
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways		
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road		
ATE	Acute Toxicity Estimate		
BLV	Biological limit value		
CAS-No.	Chemical Abstract Service number		
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008		
DMEL	Derived Minimal Effect level		
DNEL	Derived-No Effect Level		
EC50	Median effective concentration		
EC-No.	European Community number		
EN	European Standard		
IATA	International Air Transport Association		
IMDG	International Maritime Dangerous Goods		
LC50	Median lethal concentration		
LD50	Median lethal dose		
LOAEL	Lowest Observed Adverse Effect Level		
NOAEC	No-Observed Adverse Effect Concentration		
NOAEL	No-Observed Adverse Effect Level		
NOEC	No-Observed Effect Concentration		
OEL	Occupational Exposure Limit		
PBT	Persistent Bioaccumulative Toxic		

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Abbreviations and acronyms		
PNEC	Predicted No-Effect Concentration	
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail	
SDS	Safety Data Sheet	
vPvB	Very Persistent and Very Bioaccumulative	
WGK	Water Hazard Class	

Full text of H- and EUH-statements		
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
Flam. Liq. 2	Flammable liquids, Category 2	
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis	
H225	Highly flammable liquid and vapour.	
H319	Causes serious eye irritation.	
H336	May cause drowsiness or dizziness.	

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.