CERTIFICATE OF ANALYSIS

PRODUCT NAME:ISOPROPYL ALCOHOLBATCH NUMBER:4563003

BEST BEFORE DATE: December 2027

PROPERTY	SPECIFICATION	RESULT
APPEARANCE, ODOUR	COLOURLESS CLARITY LIQUID, NO ODOUR	CONFORMS
PURITY %	99.8% MIN	99.99%
COLOUR (HAZEN)	5 MAX	
WATER CONTENT %	0.0500 MAX	0.0054
DENSITY AT 20°C, g/cm ³	0.785 – 0.787	0.786
ACIDITY	MAX 10	2
KMN04 TEST	NLT 30	40
RESIDUE AFTER EVAPORATION	NMT 15	2

FOOD ALLERGEN DECLARATION

ISOPROPYL ALCOHOL

CAS NUMBER 67-63-0

EC NUMBER 200-661-7

CHEMICAL NAME PROPAN-2-OL

We hereby confirm that the above material does not contain the following allergens on the basis of Regulation (EU) 1169/2011:

Wheat/Rye/Barley (incl Gluten)	Illegal Dyes e.g. Sudan, Orange II, Para Red etc.	Rice
Oats (incl Bran)	Flavourings - specify	Salt added
Soya	Caffeine	Sugar/Sweeteners added
Soya Derivatives - specify	Сосоа	Ethanol
Sesame Seed / Seed Oil	Caramel	Hydrolysed Vegetable Protein
Poppy Seed / Seed Oil	Coconut	Textured Vegetable Protein
Maize	Coriander	Glutamate (naturally occurring)
Maize Derivatives - specify	Honey	MSG added
Egg/Egg Derivatives	Celery	Azo Colours
Milk/Milk Derivatives	Mustard	Natural Colours
Beef/Beef Derivatives	Yeast/Yeast Extract	Fruit/Fruit Derivatives - specify
Animal Products - specify	Phenylalanine	Orange
Pork/Pork Derivatives	Peanuts/Peanut Derivatives	Kiwi
Fish/Shellfish - specify	Other Nut/Nut Derivatives	Onion/Garlic/Leek, etc.
Preservatives - specify	Other Seed/Seed Derivatives	Herbs/Spices - specify
Sulphur Dioxide	Palm Oil or Palm Derivatives	
Sulphites	Latex / Natural Rubber	
BHA (In Accordance with 95/2/EC)	Lupins	
BHT (In Accordance with 95/2/EC)	Molluscs	
Antioxidants - others (specify)	Vegetables/Vegetable Derivatives - specify	

CMR CERTIFICATE

ISOPROPYL ALCOHOL

CAS NUMBER 67-63-0

EC NUMBER 200-661-7

CHEMICAL NAME PROPAN-2-OL

We hereby declare that we have received confirmation from the Manufacturer to state that the above material does not contain any of the listed CMR products, outlined in Article 15 of the Cosmetics Regulation 1223/2009 (CMR substances of category 1A, 1B, or 2 under Part 3 of Annex IV to Regulation (EC) NO 1272/2008).

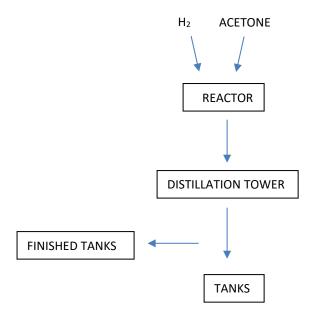
FLOW CHART

ISOPROPYL ALCOHOL

CAS NUMBER 67-63-0

EC NUMBER 200-661-7

CHEMICAL NAME PROPAN-2-OL



GMO STATEMENT

ISOPROPYL ALCOHOL

CAS NUMBER 67-63-0

EC NUMBER 200-661-7

CHEMICAL NAME PROPAN-2-OL

> We hereby confirm that, to the best of our knowledge, no Genetically Modified Organisms (GMO's) are used in the Production of the above material.

IFRA DECLARATION

ISOPROPYL ALCOHOL

CAS NUMBER 67-63-0

EC NUMBER 200-661-7

CHEMICAL NAME PROPAN-2-OL

We hereby declare that we have received confirmation from the manufacturer for the above material supplied to state that it conforms the following requirements:

- The product is manufactured as per IFRA code of practices.
- The product is neither restricted nor prohibited by IFRA for use in Fragrances.
- The product conforms to IFRA 50th amendment.

SAFETY DATA SHEET ISOPROPYL ALCOHOL

Commission Regulation (EU) No 2015/830 of 28 May 2015.

SECTION 1: Identification of the substance/mixture and of the company/undertaking		
1.1. Product identifier		
Product name	ISOPROPYL ALCOHOL	
Chemical name	PROPAN-2-OL	
Product number	IPA, 2D S00828	
REACH registration number	01-2119457558-25-XXXX	
REACH registration notes	REACH registration only covers products which OQEMA have imported into Europe or sourced within Europe. If the product is sold directly outside Europe this is not covered under the registration. It is the responsibility of the subsequent importer into Europe to ensure their volume of product is covered under the REACH regulations.	
CAS number	67-63-0	
EC number	200-661-7	
1.2. Relevant identified uses of the substance or mixture and uses advised against		
1.3. Details of the supplier of the safety data sheet		
Supplier	Madar Corporation Limited 19 - 20 Sandleheath Industrial Estate Fordingbridge SP6 1PA	

+44 (0)1425 655 555 technical@madarcorporation.co.uk

1.4. Emergency telephone number

Emergency telephone

EMERGENCY INFORMATION OUT OF OFFICE HOURS CONTACT CARECHEM 24: +44 (0)1270 502891

SECTION 2: Hazards identification

Classification (EC 1272/2008)	
Physical hazards	Flam. Liq. 2 - H225
Health hazards	Eye Irrit. 2 - H319 STOT SE 3 - H336
Environmental hazards	Not Classified
2.2. Label elements	
EC number	200-661-7
Hazard pictograms	
Signal word	Danger
Hazard statements	H225 Highly flammable liquid and vapour. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.
Precautionary statements	 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P240 Ground and bond container and receiving equipment. P241 Use explosion-proof electrical equipment. P242 Use non-sparking tools. P243 Take action to prevent static discharges. P261 Avoid breathing vapour/ spray.
Contains	PROPAN-2-OL
Supplementary precautionary statements	 P264 Wash contaminated skin thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P312 Call a POISON CENTRE/doctor if you feel unwell. P337+P313 If eye irritation persists: Get medical advice/ attention. P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish. P403+P235 Store in a well-ventilated place. Keep cool. P405 Store locked up. P501 Dispose of contents/ container in accordance with national regulations.
2.3. Other hazards	

2.1. Classification of the substance or mixture

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

PROPAN-2-OL	99.9%
CAS number: 67-63-0	EC number: 200-661-7
Classification Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336	
The full text for all hazard st	tatements is displayed in Section 16.
SECTION 4: First aid meas	ures
4.1. Description of first aid r	neasures
General information	In all cases of doubt, or when symptoms persist, seek medical attention. Show this safety data sheet to the doctor in attendance Get medical attention.
Inhalation	Remove person to fresh air and keep comfortable for breathing. Get medical attention. If breathing stops, provide artificial respiration.
Ingestion	Do not induce vomiting unless under the direction of medical personnel. If person is conscious, rinse mouth with water. Give plenty of water to drink. Never give anything by mouth to an unconscious person. Get medical attention.
Skin contact	Wash skin thoroughly with soap and water. Get medical attention.
Eye contact	Get medical attention immediately. Separate eyelids, wash the eyes thoroughly with water (15 minutes). Get medical attention.
Protection of first aiders	No information available.
4.2. Most important sympto	ms and effects, both acute and delayed
General information	The most important known symptoms and effects are described in the labelling (section 2.2) and section 11
Inhalation	No information available.
Ingestion	No information available.
Skin contact	No information available.
Eye contact	No information available.
4.3 Indication of any imme	tiate medical attention and special treatment needed

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

No information available.

Specific treatments	No information available.
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SECTION 5: Firefighting measures

Notes for the doctor

5.1. Extinguishing media Suitable extinguishing media Foam. Carbon dioxide (CO2). Dry powder. Water spray. Alcohol-resistant foam. Dry chemicals. Cool containers with water spray Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire. media

5.2. Special hazards arising from the substance or mixture

Flammable liquid May release vapours that form flammable mixtures at or above the flash point. Empty containers or liners may retain some product residues and hence be potentially hazardous. Do not pressurise, cut, weld, drill, grind or otherwise expose containers to heat or sources of ignition. Prevent entry into waterways, sewers, basements or confined areas May evolve oxides of carbon (COx) under fire conditions.
No information available.
Cool container with water spray from a safe distance
Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Wear protective clothing as described in Section 8 of this safety data sheet. Avoid breathing vapours, mist or gas. Provide adequate ventilation. Remove all sources of ignition. Keep unnecessary and unprotected personnel away from the spillage. Immediately evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapour can accumulate in low areas.
For non-emergency personnel	This material may be hazardous by contact, do not attempt to clean up the spill. Call trained emergency responders immediately. Clean up only to be done by Emergency responders/personnel. Restrict access to area as appropriate until clean-up operations are complete. Use appropriate personal protective equipment.
For emergency responders	Use appropriate personal protective equipment during clean-up Stop leak if safe to do so. Provide adequate ventilation. Eliminate all sources of ignition. Do not touch or walk into spilled material. Restrict access to area as appropriate until clean-up operations are complete. Ensure clean-up is conducted by trained personnel only. Have emergency equipment (for fires, spills, leaks, etc.) readily available. Notify appropriate government, occupational health and safety and environmental authorities.

6.2. Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent entry into drains. Avoid the spillage or runoff entering drains, sewers or watercourses. Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Small Spillages: Soak up spill with absorbent material. Place residues in a suitable, covered, properly labelled container. Wash affected area. Large Spillages: Contain liquid using absorbent material, by digging trenches or by diking. Reclaim into recovery or salvage drums or tank truck for proper disposal. Wash site of spillage thoroughly with water. Contact an approved waste hauler for disposal of contaminated recovered material. Dispose of contents/container in accordance with local regulations.

6.4. Reference to other sections

Reference to other sections	See Section 7 for information on safe handling. Wear protective clothing as described in
	Section 8 of this safety data sheet. See Section 11 for additional information on health
	hazards. See Section 12 for additional information on ecological hazards. Collect and dispose of spillage as indicated in Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions	Provide adequate ventilation. Do not breathe vapours. Do not breathe gas. Do not breathe dust. Container must be kept tightly closed when not in use. Only store in correctly labelled containers. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use personal protective equipment as required. Protect against electrostatic charges.		
Advice on general occupational hygiene	Avoid contact with eyes and skin. Do not eat, drink or smoke when using this product. Eye wash facilities and emergency shower must be available when handling this product. Good personal hygiene procedures should be implemented. Wash skin thoroughly after handling. Take off immediately all contaminated clothing and wash it before reuse.		
7.2. Conditions for safe storage	7.2. Conditions for safe storage, including any incompatibilities		
Storage precautions	Store in tightly-closed, original container in a dry, cool and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Only store in correctly labelled containers. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not store with oxidising agents.		
Storage class	No information available.		
7.3. Specific end use(s)			
Specific end use(s)	The identified uses for this product are detailed in Section 1.2.		
Usage description	No information available.		
SECTION 8: Exposure controls/Personal protection			

8.1. Control parameters

Occupational exposure limits

No information available.

PROPAN-2-OL

Long-term exposure limit (8-hour TWA): WEL 400 ppm 999 mg/m³ Short-term exposure limit (15-minute): WEL 500 ppm 1250 mg/m³ WEL = Workplace Exposure Limit.

Ingredient comments	No information available.
Biological limit values	No information available.
DNEL	Workers - Inhalation; Long term systemic effects: 500 mg/m ³ Workers - Dermal; Long term systemic effects: 888 mg/kg/day General population - Inhalation; Long term systemic effects: 89 mg/m ³ General population - Dermal; Long term systemic effects: 319 mg/kg/day General population - Oral; Long term systemic effects: 26 mg/kg/day
DMEL	No information available.
PNEC	Fresh water; 140.9 mg/l marine water; 140.9 mg/l STP; 2 251 mg/l Sediment (Freshwater); 552 mg/kg Sediment (Marinewater); 552 mg/kg Soil; 28 mg/kg Oral (secondary poisoning); 160 mg/kg

PROPAN-2-OL (CAS: 67-63-0)

DNEL	Workers - Inhalation; Long term systemic effects: 500 mg/m ³ Workers - Dermal; Long term systemic effects: 888 mg/kg/day General population - Inhalation; Long term systemic effects: 89 mg/m ³ General population - Dermal; Long term systemic effects: 319 mg/kg/day General population - Oral; Long term systemic effects: 26 mg/kg/day
PNEC	Fresh water; 140.9 mg/l marine water; 140.9 mg/l STP; 2 251 mg/l Sediment (Freshwater); 552 mg/kg Sediment (Marinewater); 552 mg/kg Soil; 28 mg/kg

Oral (secondary poisoning); 160 mg/kg

8.2. Exposure controls

Protective equipment



Personal protection

Eye/face protection

Hand protection

controls

Appropriate engineering









Emergency shower and eye wash facilities should be readily available Provide adequate ventilation.

No information available.

Personal protective equipment for eye and face protection should comply with European Standard EN166. Chemical splash goggles and face shield.

To protect hands from chemicals, gloves should comply with European Standard EN374. Wear protective gloves. Gloves must be inspected prior to use. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands For full contact: Nitrile rubber. Minimum layer thickness: 0.4mm breakthrough time >480mins For splash contact: Nitrile rubber. Minimum layer thickness: 0.2mm Breakthrough time 60 min (EN374) If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Other skin and body
protectionChemical resistant boots should comply with European standard EN345. Body protection
must be chosen depending on activity and possible exposure, eg. apron, protecting boots,
chemical-protection suit (according to DIN-EN 465). Impervious clothing - apron/boots. Flame
retardant antistatic protective clothing. The type of protective equipment must be selected
according to the concentration and amount of the dangerous substance at the specific
workplace

 Hygiene measures
 Avoid contact with skin, eyes and clothing Do not eat, drink or smoke when using this product. Eye wash facilities and emergency shower must be available when handling this product. Good personal hygiene procedures should be implemented. Wash skin thoroughly after handling. Take off immediately all contaminated clothing and wash it before reuse. Keep away from foodstuffs, beverages and feed.

Respiratory protection	Where risk assessment shows air-purifying respirators are appropriate use a full-face respiratior with multi purpose combination or type ABEK (EN 14387). If ther respirator is the sole means of protection, use a full-face supplied air respirator. use respirators and components tested and approved under appropriate government standards such as NIOSH or CEN
Thermal hazards	No information available.
Environmental exposure	No information available.

controls

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties		
Appearance	Liquid.	
Colour	Colourless.	
Odour	Alcohol Like	
Odour threshold	No information available.	
рН	No information available.	
Melting point	-89.5°C	
Initial boiling point and range	82°C	
Flash point	12°C Closed cup.	
Evaporation rate	No information available.	
Evaporation factor	No information available.	
Flammability (solid, gas)	No information available.	
Upper/lower flammability or explosive limits	Upper flammable/explosive limit: 12.7 % Lower flammable/explosive limit: 2 %	
Other flammability	No information available.	
Vapour pressure	43.2 hPa @ 20°C 58.7 hPa @ 25°C	
Vapour density	No information available.	
Relative density	0.785 g/ml @ 25°C	
Bulk density	No information available.	
Solubility(ies)	Completely soluble in water.	
Partition coefficient	log Pow: 0.05	
Auto-ignition temperature	425°C	
Decomposition Temperature	No information available.	
Viscosity	No information available.	
Explosive properties	No information available.	
Explosive under the influence of a flame	No information available.	
Oxidising properties	No information available.	
Comments	No information available.	

9.2. Other information Other information No information available. **Refractive index** No information available. Particle size No information available. Molecular weight No information available. Volatility No information available. Saturation concentration No information available. Critical temperature No information available. Volatile organic compound No information available. SECTION 10: Stability and reactivity 10.1. Reactivity Reactivity Stable under normal conditions 10.2. Chemical stability Stability Stable at normal ambient temperatures and when used as recommended. Reacts with air to form peroxides. 10.3. Possibility of hazardous reactions Possibility of hazardous Hazardous polymerisation does not occur reactions 10.4. Conditions to avoid Conditions to avoid Avoid heat, flames and other sources of ignition. Take precautionary measures against static discharges. 10.5. Incompatible materials Materials to avoid Oxidising agents. Strong oxidising agents. Acid anhydrides. Aluminium. Halogenated compounds Acids. 10.6. Hazardous decomposition products Hazardous decomposition Fire creates: Carbon Oxides (CO + CO2) products SECTION 11: Toxicological information 11.1. Information on toxicological effects **Toxicological effects** No information available. Other health effects No information available. Acute toxicity - oral Notes (oral LD₅₀) LD₅₀ 5.84 g/kg, bw, Oral, Rat Klimisch rating 2 1948 OECD 401 Acute toxicity - dermal Notes (dermal LD₅₀) LD₅₀ 16.4 ml/kg, bw, Dermal, Rabbit Klimisch rating 2 1948 OECD 402 Acute toxicity - inhalation Notes (inhalation LC₅₀) LC50 > 10 000 ppm, Inhalation, Rat KLIMISCH RATING 1 1991 OECD 403 LC50 37.5 mg/l, Inhalation, Rat OECD 403 Skin corrosion/irritation

Skin corrosion/irritation	No information available.	
Animal data	Dose: , 4 hours, Rabbit Not classified. Klimisch rating 2 1975	
Human skin model test	No information available.	
Extreme pH	No information available.	
Serious eye damage/irritation Serious eye damage/irritation	Dose: 0.1 mL, 14 days, Rabbit Category II klimisch rating 1 1986 OECD405	
Respiratory sensitisation Respiratory sensitisation	No information available.	
Skin sensitisation Skin sensitisation	Buehler test - Guinea pig: Not sensitising. Klimisch rating 1 1980 OECD 406	
Germ cell mutagenicity Genotoxicity - in vitro	Mammalian cell gene mutation assay: Negative. Klimisch rating 1 1990 OECD 476 Bacterial reverse mutation test: Negative. Klimisch rating 2 1992 OECD 471	
Genotoxicity - in vivo	Micronucleus assay: Negative. Klimisch rating 2 1991 OECD 474	
Carcinogenicity Carcinogenicity	NOEL 5 000 ppm, Inhalation, Rat Klimisch rating 1 1994 1997 OECD 451 NOEL 5 000 ppm, Inhalation, Mouse Klimisch rating 2 1993 1997 OECD 451	
Target organ for carcinogenicity	No information available.	
IARC carcinogenicity	No information available.	
NTP carcinogenicity	No information available.	
Reproductive toxicity Reproductive toxicity - fertility	Weight of evidence. Two-generation study - NOAEL 500 mg/kg/day, Oral, Rat P0 Two- generation study - NOAEL 500 mg/kg/day, Oral, Rat F1 Two-generation study - NOAEL 1 000 mg/kg/day, Oral, Rat F1 Klimisch rating 1 1992 OECD 416	
Reproductive toxicity - development	Weight of evidence. Maternal toxicity: - NOAEL: 400 mg/kg/day, Oral, Rat Developmental toxicity: - NOAEL: 400 mg/kg/day, Oral, Rat Klimisch rating 1 1990 OECD 414	
Specific target organ toxicity -	single exposure	
STOT - single exposure	No information available.	
Target organs	No information available.	
Specific target organ toxicity - r		
STOT - repeated exposure	NOEC 500 ppm, Inhalation, Rat NOAEC 5 000 ppm, Inhalation, Rat NOEC 5 000 ppm, Inhalation, Rat Klimisch rating 1 1994 OECD 451	
Target organs	No information available.	
Aspiration hazard Aspiration hazard	No information available.	
Toxicokinetics	No information available.	
General information	No information available.	
Inhalation	No information available.	

Ingestion	No information available.
Skin contact	No information available.
Eye contact	No information available.
Acute and chronic health hazards	No information available.
Route of exposure	No information available.
Target organs	No information available.
Medical symptoms	No information available.
Medical considerations	No information available.
SECTION 12: Ecological infor	nation
Ecotoxicity	No information available.
12.1. Toxicity	
Toxicity	No information available.
Acute aquatic toxicity	
Acute toxicity - fish	LC₅₀, 96 hours: 10 000 mg/l, Pimephales promelas (Fat-head Minnow) LC₅₀, 96 hours: 9 640 mg/l, Pimephales promelas (Fat-head Minnow) klimisch rating 2 1983 OECD 203
Acute toxicity - aquatic invertebrates	LC₅₀, 24 hours: > 10 000 mg/l, Daphnia magna LC₀, 24 hours: 5 000 mg/l, Daphnia magna klimisch rating 2 1977 OECD 202
Acute toxicity - aquatic plants	Toxicity threshold, 7 days: 1 800 mg/l, Scenedesmus quadricauda klimisch rating 2 1980
Acute toxicity - microorganisms	Toxicity threshold, 16 hours: 1 050 mg/l, Pseudomonas putida klimisch rating 2 1980
Acute toxicity - terrestrial	No information available.
<u>Chronic aquatic toxicity</u> Chronic toxicity - fish early life stage	No information available.
Short term toxicity - embryo and sac fry stages	No information available.
Chronic toxicity - aquatic invertebrates	No information available.
Toxicity to soil	No information available.
Toxicity to terrestrial plants	No information available.
12.2. Persistence and degrada	ability

Persistence and degradability	No information available.		
Phototransformation	No information available.		
Stability (hydrolysis)	No information available.		
Biodegradation	Water - Degradation 53: 5 days The substance is readily biodegradable. klimisch rating 2 1979 EU method C.5 EU Method C.6		
Biological oxygen demand	No information available.		
Chemical oxygen demand	No information available.		
12.3. Bioaccumulative potentia			
Bioaccumulative potential	log Pow: <= 4,		
Partition coefficient	log Pow: 0.05		
12.4. Mobility in soil			
Mobility	No information available.		
Adsorption/desorption coefficient	No information available.		
Henry's law constant	No information available.		
Surface tension	No information available.		
12.5. Results of PBT and vPvB assessment			
12.5. Results of PBT and vPv	3 assessment		
<u>12.5. Results of PBT and vPvB</u> Results of PBT and vPvB assessment	3 assessment This substance is not classified as PBT or vPvB according to current EU criteria.		
Results of PBT and vPvB			
Results of PBT and vPvB assessment			
Results of PBT and vPvB assessment 12.6. Other adverse effects	This substance is not classified as PBT or vPvB according to current EU criteria. No information available.		
Results of PBT and vPvB assessment 12.6. Other adverse effects Other adverse effects	This substance is not classified as PBT or vPvB according to current EU criteria. No information available.		
Results of PBT and vPvB assessment <u>12.6. Other adverse effects</u> Other adverse effects SECTION 13: Disposal consid	This substance is not classified as PBT or vPvB according to current EU criteria. No information available.		
Results of PBT and vPvB assessment 12.6. Other adverse effects Other adverse effects SECTION 13: Disposal consid 13.1. Waste treatment method	This substance is not classified as PBT or vPvB according to current EU criteria. No information available. erations Image: Constraint of the second secon		
Results of PBT and vPvB assessment <u>12.6. Other adverse effects</u> Other adverse effects <u>SECTION 13: Disposal consid</u> <u>13.1. Waste treatment method</u> General information	This substance is not classified as PBT or vPvB according to current EU criteria. No information available. erations Disposal should be in accordance with applicable regional, national and local laws and regulations. Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company Empty/contaminated containers may contain product residues so		
Results of PBT and vPvB assessment 12.6. Other adverse effects Other adverse effects SECTION 13: Disposal consid 13.1. Waste treatment method General information Disposal methods	This substance is not classified as PBT or vPvB according to current EU criteria. No information available. erations Disposal should be in accordance with applicable regional, national and local laws and regulations. Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company Empty/contaminated containers may contain product residues so should be disposed of in the same way as the product. 16 03 05 The waste code classification is to be carried out according to the European Waste Catalogue (EWC).		
Results of PBT and vPvB assessment 12.6. Other adverse effects Other adverse effects SECTION 13: Disposal consid 13.1. Waste treatment method General information Disposal methods Waste class	This substance is not classified as PBT or vPvB according to current EU criteria. No information available. erations Disposal should be in accordance with applicable regional, national and local laws and regulations. Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company Empty/contaminated containers may contain product residues so should be disposed of in the same way as the product. 16 03 05 The waste code classification is to be carried out according to the European Waste Catalogue (EWC).		
Results of PBT and vPvB assessment 12.6. Other adverse effects Other adverse effects SECTION 13: Disposal consid 13.1. Waste treatment method General information Disposal methods Waste class SECTION 14: Transport inform	This substance is not classified as PBT or vPvB according to current EU criteria. No information available. erations Disposal should be in accordance with applicable regional, national and local laws and regulations. Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company Empty/contaminated containers may contain product residues so should be disposed of in the same way as the product. 16 03 05 The waste code classification is to be carried out according to the European Waste Catalogue (EWC).		
Results of PBT and vPvB assessment 12.6. Other adverse effects Other adverse effects SECTION 13: Disposal consid 13.1. Waste treatment method General information Disposal methods Waste class SECTION 14: Transport inform 14.1. UN number	This substance is not classified as PBT or vPvB according to current EU criteria. No information available. erations Disposal should be in accordance with applicable regional, national and local laws and regulations. Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company Empty/contaminated containers may contain product residues so should be disposed of in the same way as the product. 16 03 05 The waste code classification is to be carried out according to the European Waste Catalogue (EWC). nation		

UN No. (ADN)	1219	
14.2. UN proper shipping name		
Proper shipping name (ADR/RID)	ISOPROPANOL (ISOPROPYL ALCOHOL)	
Proper shipping name (IMDG)	ISOPROPANOL (ISOPROPYL ALCOHOL)	
Proper shipping name (ICAO)	ISOPROPANOL (ISOPROPYL ALCOHOL)	
Proper shipping name (ADN)	ISOPROPANOL (ISOPROPYL ALCOHOL)	
14.3. Transport hazard class(e	<u>s)</u>	
ADR/RID class	3	
ADR/RID classification code	F1	
ADR/RID label	3	
IMDG class	3	
ICAO class/division	3	
ADN class	3	
Transport labels		
14.4. Packing group		
ADR/RID packing group	II	
IMDG packing group	П	
ADN packing group	П	
ICAO packing group	II	

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant No.

14.6. Special precautions for user		
EmS	F-E, S-D	
ADR transport category	2	
Emergency Action Code	•2YE	
Hazard Identification Number (ADR/RID)	33	
Tunnel restriction code	(D/E)	
44.7 Transport in bull coordi		

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

SECTION 15: Regulatory information

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

National regulations

No information available.

EU legislation	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).
Guidance	No information available.
Health and environmental listings	No information available.
Authorisations (Annex XIV Regulation 1907/2006)	No information available.
Restrictions (Annex XVII Regulation 1907/2006)	No information available.
15.2. Chemical safety assessr	ment
No information available.	
Inventories EU - EINECS/ELINCS No information available.	
Canada - DSL/NDSL No information available.	
US - TSCA No information available.	
US - TSCA 12(b) Export Notif No information available.	ication
Australia - AICS No information available.	
Japan - ENCS No information available.	
Korea - KECI No information available.	
China - IECSC No information available.	
Philippines – PICCS No information available.	
New Zealand - NZIOC No information available.	
Taiwan - TCSI No information available.	

South Korea

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet	ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
	ADN: European Agreement concerning the International Carriage of Dangerous Goods by
	Inland Waterways. CAS: Chemical Abstracts Service.
	DNEL: Derived No Effect Level.
	GHS: Globally Harmonized System.
	IATA: International Air Transport Association.
	ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air.
	IMDG: International Maritime Dangerous Goods.
	Kow: Octanol-water partition coefficient.
	LC ₅₀ : Lethal Concentration to 50 % of a test population.
	LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose). PBT: Persistent, Bioaccumulative and Toxic substance.
	PNEC: Predicted No Effect Concentration.
	REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.
	vPvB: Very Persistent and Very Bioaccumulative.
	BCF: Bioconcentration Factor.
	BOD: Biochemical Oxygen Demand.
	EC₅₀: 50% of maximal Effective Concentration. LOAEC: Lowest Observed Adverse Effect Concentration.
	LOAEC: Lowest Observed Adverse Effect Level.
	NOAEC: No Observed Adverse Effect Concentration.
	NOAEL: No Observed Adverse Effect Level.
	NOEC: No Observed Effect Concentration.
	LOEC: Lowest Observed Effect Concentration.
	DMEL: Derived Minimal Effect Level.
	M/I: Manufacturer / Importer MSDS: Material Safety Data Sheet
	MSDS: Material Safety Data Sheet SDS: Safety Data Sheet
	OECD: Organization for Economic Co-operation and Development
	PPE: Personal Protection Equipment
	QSAR: Qualitative Structure Activity Relationship
	PBT: Persistent, Bioaccumulative and Toxic substance
	SCBA: Self-Contained Breathing Apparatus
	STOT: Specific Target Organ Toxicity
	STOT (RE): Repeated Exposure STOT (SE): Single Exposure
General information	No information available.
Key literature references and sources for data	Source: European Chemicals Agency, http://echa.europa.eu/ Material Safety Data Sheet, Misc. manufacturers.
Classification procedures according to Regulation (EC) 1272/2008	No information available.
Training advice	No information available.
Revision comments	This is the first issue.
Revision date	09/02/2022
Revision	000
SDS number	23522

Hazard statements in fullH225 Highly flammable liquid and vapour.H319 Causes serious eye irritation.H336 May cause drowsiness or dizziness.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

PRODUCT SPECIFICATION

CAS NUMBER: 67-63-0 EC NUMBER: 200-661-7 REV: 00 DATE: 13.01.2022

ISOPROPYL ALCOHOL

CHARACTERISTIC	TEST METHOD	SPECIFICATION
COLOUR AND APPEARANCE		COLOURLESS LIQUID
PURITY WEIGHT (%wt)	GC	99.9 MIN
WATER (%wt)	KARL FISCHER	0.10 MAX
SULFIDE AS SULPHUR (ppm)	GB/T6324.4	2.0 MAX
CARBONYL AS ACETONE (%wt)	GB/T6324.5	0.02 MAX
ACIDITY AS ACETIC ACID (%wt)	VOLUMETRIC PRECIPITATION METHOD	0.002 MAX
NON-VOLATILE RESIDUE (%wt)	GB/T6324.2	0.002 MAX
COLOUR (APHA)	PLATINUM-COLBALT METHOD	10 MAX
DENSITY AT 20°C (g/cm³)	AREOMETER	0.784-0.786
BENZEN PARAMETER (ppm)	GC	2 MAX

APPLICATIONS:

Applications of IPA include pharmaceuticals, cosmetics, plastics, fragrances and paint. It is also used in the electronics industry as a dehydrating and cleaning agent.

STORAGE & PACKAGING:

Store in a cool, dry place, away from direct sunlight. Packed in 800kg IBCs.

VEGAN SUITABILITY STATEMENT

ISOPROPYL ALCOHOL

CAS NUMBER 67-63-0

EC NUMBER 200-661-7

CHEMICAL NAME PROPAN-2-OL

> We hereby confirm that, to the best of our knowledge, the whole production process of the above material, and the end product, is not processed with any animal products, and is suitable for a vegetarian and vegan use.