



SAFETY DATA SHEET

AS0011

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

1.1. Product identifier

Product name	AS0011
Product number	AS0011, FP-001212
Synonyms; trade names	ISOPROPANOL
REACH registration number	01-2120063207-61-0000
CAS number	67-63-0
EU index number	603-117-00-0
EC number	200-661-7

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

Identified uses	Etchant/cleaner.
Uses advised against	No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier	APOLLO CHEMICALS LTD SANDY WAY AMINGTON INDUSTRIAL ESTATE TAMWORTH STAFFS B77 4DS T: +44 (0) 1827 54281 F: +44 (0) 1827 53030 E: sds@apollo.co.uk
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1.4. Emergency telephone number

Emergency telephone	+44 01827 69662 (NOT 24HRS - 8am-5pm mon-fri)
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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
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AS0011**Pictogram****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.
 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.
 P501 Dispose of contents/ container in accordance with national regulations.
 P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

Contains

PROPAN-2-OL

Supplementary precautionary statements

P240 Ground/ bond container and receiving equipment.
 P241 Use explosion-proof electrical equipment.
 P242 Use only non-sparking tools.
 P243 Take precautionary measures against static discharge.
 P261 Avoid breathing vapour/ spray.
 P264 Wash contaminated skin thoroughly after handling.
 P271 Use only outdoors or in a well-ventilated area.
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P312 Call a POISON CENTER/ 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+P233 Store in a well-ventilated place. Keep container tightly closed.
 P403+P235 Store in a well-ventilated place. Keep cool.
 P405 Store locked up.

2.3. Other hazards**SECTION 3: Composition/information on ingredients****3.2. Mixtures****PROPAN-2-OL****60-100%**

CAS number: 67-63-0

EC number: 200-661-7

REACH registration number: 01-2120063207-61-0000

Classification

Flam. Liq. 2 - H225
 Acute Tox. 4 - H312
 Eye Irrit. 2 - H319
 STOT SE 3 - H336

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures**4.1. Description of first aid measures**

AS0011

General information	Remove affected person from source of contamination.
Inhalation	Move affected person to fresh air at once.
Ingestion	DO NOT induce vomiting. Get medical attention immediately.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing. Show this Safety Data Sheet to the medical personnel.

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

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Vapours may cause drowsiness and dizziness. Irritation of nose, throat and airway.
Ingestion	May cause chemical burns in mouth and throat.
Skin contact	Prolonged skin contact may cause redness and irritation.
Eye contact	Severe irritation, burning and tearing.

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

Notes for the doctor	No specific recommendations. If in doubt, get medical attention promptly.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with foam, carbon dioxide, dry powder or water fog.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards	The product is flammable. Heating may generate flammable vapours. The product is highly flammable.
Hazardous combustion products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Oxides of carbon. Oxides of nitrogen.

5.3. Advice for firefighters

Protective actions during firefighting	Containers close to fire should be removed or cooled with water. Do not allow water to contact any leaked material.
Special protective equipment for firefighters	Wear chemical protective suit.

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.
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6.2. Environmental precautions

Environmental precautions	Do not discharge into drains or watercourses or onto the ground.
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6.3. Methods and material for containment and cleaning up

AS0011

Methods for cleaning up Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Absorb spillage with non-combustible, absorbent material.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Eliminate all sources of ignition. Vapours may accumulate on the floor and in low-lying areas. Static electricity and formation of sparks must be prevented. Avoid inhalation of vapours and spray/mists.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep away from heat, sparks and open flame. Store in closed original container at temperatures between 5°C and 25°C.

Storage class Flammable liquid storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

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

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

DNEL

Consumer - Oral; Long term systemic effects: 26 mg/kg bw/day
 Consumer - Dermal; Long term systemic effects: 319 mg/kg bw/day
 Workers - Dermal; Long term systemic effects: 888 mg/kg bw/day
 Consumer - Inhalation; Long term systemic effects: 89 mg/m³
 Workers - Inhalation; Long term systemic effects: 500 mg/m³

PNEC

- Fresh water; 140.9 mg/l
 - Marine water; 140.9 mg/l
 - Sediment (Freshwater); 552 mg/kg
 - Sediment (Marinewater); 552 mg/kg
 - STP; 2251 mg/l
 - Intermittent release; 140.9 mg/l
 - Soil; 28 mg/kg

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

DNEL

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- Soil; 28 mg/kg

8.2. Exposure controls**Protective equipment****Appropriate engineering controls**

Provide adequate ventilation. Avoid inhalation of vapours. Observe any occupational exposure limits for the product or ingredients.

Eye/face protection

The following protection should be worn: Chemical splash goggles or face shield.

Hand protection

It is recommended that gloves are made of the following material: Nitrile rubber. It should be noted that liquid may penetrate the gloves. Frequent changes are recommended. For exposure up to 8 hours, wear gloves made of the following material: Viton rubber (fluoro rubber).

Other skin and body protection

Wear suitable protective clothing as protection against splashing or contamination. Wear apron or protective clothing in case of contact.

Hygiene measures

Use engineering controls to reduce air contamination to permissible exposure level. Wash hands after handling.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn.

Environmental exposure controls

Keep container tightly sealed when not in use.

SECTION 9: Physical and Chemical Properties**9.1. Information on basic physical and chemical properties**

Appearance	Coloured liquid.
Colour	Various colours.
Odour	Alcoholic.
Odour threshold	Not available.
pH	Estimated value. pH (concentrated solution): 7-8
Melting point	-89.5°C
Initial boiling point and range	82°C @ 20
Flash point	Estimated value. 13°C
Evaporation rate	Not determined.
Evaporation factor	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	Estimated value. : 2%-12%

AS0011

Other flammability	Not available.
Vapour pressure	43 hPa @ 20°C
Vapour density	Not available.
Relative density	0.785 @ 20°C
Bulk density	Not available.
Solubility(ies)	Insoluble in water.
Partition coefficient	Not available.
Auto-ignition temperature	Estimated value. 425°C
Decomposition Temperature	Not available.
Viscosity	Kinematic viscosity > 20.5 mm ² /s.
Explosive properties	Not available.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	Not available.
Comments	Information given is applicable to the product as supplied.

9.2. Other information

Other information	No information required.
Refractive index	Not available.
Particle size	Not available.
Molecular weight	Not available.
Volatility	Not available.
Saturation concentration	Not available.
Critical temperature	Not available.
Volatile organic compound	This product contains a maximum VOC content of 873 g/litre.

SECTION 10: Stability and reactivity**10.1. Reactivity**

Reactivity	There are no known reactivity hazards associated with this product.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Not applicable.
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10.4. Conditions to avoid

Conditions to avoid	Avoid contact with strong oxidising agents.
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10.5. Incompatible materials

Materials to avoid	Acids - oxidising. Strong acids. Strong alkalis.
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AS0011

10.6. Hazardous decomposition products

Hazardous decomposition products Does not decompose when used and stored as recommended.

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Toxicological information on ingredients.****PROPAN-2-OL****Acute toxicity - oral**

Acute toxicity oral (LD₅₀ mg/kg) 5,840.0

Species Rat

ATE oral (mg/kg) 5,840.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 2,000.0

Species Rabbit

ATE dermal (mg/kg) 2,000.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 30.0

Species Rat

ATE inhalation (vapours mg/l) 30.0

SECTION 12: Ecological Information**12.1. Toxicity**

Acute toxicity - fish LC₅₀, 48 hours: >100 mg/l, Leuciscus idus (Golden orfe)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: >100 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 72 hours: >100 mg/l, Scenedesmus subspicatus

Ecological information on ingredients.**PROPAN-2-OL**

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Acute toxicity - aquatic plants EC₅₀, 72 hours: >100 mg/l, Scenedesmus subspicatus

12.2. Persistence and degradability**12.3. Bioaccumulative potential**

AS0011

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.

Partition coefficient Not available.

Ecological information on ingredients.PROPAN-2-OL

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.

Partition coefficient Not available.

12.4. Mobility in soil

Mobility The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.

Ecological information on ingredients.PROPAN-2-OL

Mobility The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

Ecological information on ingredients.PROPAN-2-OL

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects Not known.

Ecological information on ingredients.PROPAN-2-OL

Other adverse effects Not known.

SECTION 13: Disposal considerations13.1. Waste treatment methods

General information Waste should be treated as controlled waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.

SECTION 14: Transport information14.1. UN number

UN No. (ADR/RID) 1219

UN No. (IMDG) 1219

AS0011

UN No. (ICAO) 1219

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(es)

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 II

ADN packing group II

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)

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**

AS0011

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).

Restrictions (Title VIII Regulation 1907/2006) not to be sold to the general public above 0.1%

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Issued by	Compliance
Revision date	03/05/2018
Revision	20
Supersedes date	01/06/2015
SDS number	20494
SDS status	Approved.
Hazard statements in full	H225 Highly flammable liquid and vapour. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.
Store Between	Store Between 5'c - 25'c
Contains SVHC	NO

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.