

Safety Data Sheet **AMYL ALCOHOL (iso)**

SDS no. GSVS1SJ3 • Version 1.0 • Date of issue: 2023-12-11

SECTION 1: Identification

GHS Product identifier

Product name AMYL ALCOHOL (iso)

Other means of identification

AMYL ALCOHOL (iso) LR

Isopentyl alcohol

Isobutyl carbinol, 3-Methyl-1-butanol AMYL ALCOHOL (iso) AR

Recommended use of the chemical and restrictions on use

Solvent, photographic chemicals, organic synthesis, pharmaceutical products, determination of fat in milk, microscopy and laboratory reagent.

Supplier's details

Name ChemSupply Australia Pty Ltd
Address 38-50 Bedford Street
5013 Gillman South Australia
Australia

Telephone 08 8440 2000
email www.chemsupply.com.au

Emergency phone number

CHEMCALL 1800 127 406 (Australia) / +64-4-917-9888 (International)

SECTION 2: Hazard identification

General hazard statement

Classified as dangerous goods according to the Australian Dangerous Goods Code (ADG).

Classified as Hazardous according to the Globally Harmonised System of classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

Classification of the substance or mixture

GHS classification in accordance with: UN GHS revision 7

- Acute toxicity, inhalation, Cat. 4
- Flammable liquids, Cat. 3

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- Specific target organ toxicity following single exposure, Cat. 3

GHS label elements, including precautionary statements

Pictograms



Signal word

Warning

Hazard statement(s)

H332

Harmful if inhaled

H335

May cause respiratory irritation

H226

Flammable liquid and vapor

AUH066

Repeated exposure may cause skin dryness or cracking

Precautionary statement(s)

P210

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233

Keep container tightly closed.

P240

Ground and bond container and receiving equipment.

P241

Use explosion-proof [electrical/ventilating/lighting/...] equipment.

P242

Use non-sparking tools.

P243

Take action to prevent static discharges.

P261

Avoid breathing dust/fume/gas/mist/vapors/spray.

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.

P312

Call a POISON CENTER/doctor/physician if you feel unwell.

P370+P378

In case of fire: Use agents recommended in Section 5 of SDS for extinction

P403+P233

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

P501

Dispose of contents/container to an approved waste disposal facility

SECTION 3: Composition/information on ingredients

Mixtures

Molecular weight: 88.15

Components

Component	CAS no.	Concentration
Isopentyl alcohol (EC no.: 204-633-5)	123-51-3	100 % (weight)
CLASSIFICATIONS: Acute toxicity, inhalation, Cat. 4; Flammable liquids, Cat. 3; Specific target organ toxicity following single exposure, Cat. 3. HAZARDS: H226 - Flammable liquid and vapor; H332 - Harmful if inhaled; H335 - May cause respiratory irritation; H336 - May cause drowsiness or dizziness.		

SECTION 4: First-aid measures

Description of necessary first-aid measures

General advice	First Aid Facilities: Maintain eyewash fountain in work area.
If inhaled	If inhaled, remove from contaminated area to fresh air immediately. Apply artificial respiration if not breathing. If breathing is difficult, give oxygen. Immediately obtain medical aid if cough or other symptoms appear.
In case of skin contact	Immediately remove contaminated clothing and wash affected area with water for at least 15 minutes. Ensure contaminated clothing is washed before re-use. Seek medical advice /attention depending on the severity.
In case of eye contact	Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open. In all cases of eye contamination it is a sensible precaution to seek medical advice.
If swallowed	Rinse mouth thoroughly with water immediately, repeat until all traces of product have been removed. DO NOT INDUCE VOMITING. Seek immediate medical advice.

Most important symptoms/effects, acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically based on judgement of doctor and individual reactions of the patient.

For advice in an emergency, contact a Poisons Information Centre (Phone Australia 131 126) or a doctor.

SECTION 5: Fire-fighting measures

Suitable extinguishing media

Caution: Use of water spray when fighting fire may be inefficient.

Small fire: Use foam, dry chemical, CO₂ or water spray.

Large fire: Use foam, fog or water spray - Do NOT use water jets.

If safe to do so, move undamaged containers from the fire area. Cool containers with flooding quantities of water until well after the fire is out. Avoid getting water inside the containers.

Specific hazards arising from the chemical

Hazards from Combustion Products: Oxides of carbon.

FLAMMABLE: This product has a low flash point. Will be easily ignited by heat, sparks or flames. Vapours will form explosive mixtures with air. Vapours will travel to source of ignition and flash back. Many vapours are heavier than air and will collect in low or confined areas (drains, basements, tanks). Many liquids are lighter than water. Containers may explode on heating. Fire will produce irritating, poisonous or corrosive gases. Vapours from run-off may create an explosion hazard.

Special protective actions for fire-fighters

Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. Fight fire from safe location.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Eliminate all ignition sources (no smoking, flares, sparks or flame) within at least 50m. All equipment used when handling the product must be earthed. Do NOT touch or walk through spilled material. Stop leak if safe to do so. Prevent entry into waterways, drains, confined areas. Vapour-suppressing foam may be used to control vapours. Water spray may be used to knock down or divert vapour clouds.

Remove ignition sources Evacuate the area of all non-essential personnel. Avoid inhalation, contact with skin, eyes and clothing.

Methods and materials for containment and cleaning up

Absorb with earth, sand or other non-combustible material. Use clean, non-sparking tool to collect absorbed material and place it into loosely-covered metal or plastic containers for later disposal. SEEK EXPERT ADVICE ON HANDLING AND DISPOSAL.

SECTION 7: Handling and storage

Precautions for safe handling

Take precautionary measures against static discharges. All electrical equipment must be flameproofed. Avoid prolonged or repeated contact with skin, eyes and clothing . Do not breath fumes which may accumulate in the vapour head-space of containers. Wear suitable protective clothing. Use with adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment.

Conditions for safe storage, including any incompatibilities

Store in cool place and out of direct sunlight. Store in well ventilated area. Store away from sources of heat or ignition. Keep containers closed at all times.

SECTION 8: Exposure controls/personal protection

Control parameters

CAS: 123-51-3

Isopentyl alcohol

AU/SWA (Australia): 125 ppm; 452 mg/m³ STEL inhalation; 100 ppm; 361 mg/m³ TWA inhalation;

Appropriate engineering controls

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, gas, etc.) below recommended exposure limits.

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336.

Skin protection

Clean impervious clothing should be worn. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

Hand Protection: Ensure hand protection complies with AS 2161, Occupational protective gloves - Selection, use and maintenance.

Body protection

Footwear: Safety boots in industrial situations is advisory, foot protection should comply with AS 2210, Occupational protective footwear - Guide to selection, care and use.

Body Protection: Clean clothing or protective clothing should be worn, preferably with and apron. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

Respiratory protection

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapor/ mist filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements. Reference should be made to Australian Standards AS/ NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical state	Liquid
Appearance	Clear, colourless liquid.
Color	No data available.
Odor	Disagreeable odour.
Odor threshold	0.042 ppm
Melting point/freezing point	-117 °C
Boiling point or initial boiling point and boiling range	132.0 °C
Flammability	FLAMMABLE.
Lower and upper explosion limit/flammability limit	Flammable Limits - Lower: 1.2 vol% Flammable Limits - Upper: 8 vol%
Flash point	43 °C (C.C.)
Explosive properties	No data available.
Auto-ignition temperature	350 °C
Decomposition temperature	No data available.
Oxidizing properties	No data available.
pH	~7 (25 g/l, H ₂ O, 20 °C); Neutral.
Kinematic viscosity	No data available.
Solubility	Solubility in Water: Soluble in water (25 g/L 20 °C). Solubility in Organic Solvents: Miscible with ethanol and ether.
Partition coefficient n-octanol/water (log value)	log Pow: 1.35
Vapor pressure	2 mm Hg (20 °C)
Evaporation rate	No data available.
Density and/or relative density	Specific Gravity: 0.81
Relative vapor density	3
Particle characteristics	No data available.

Supplemental information regarding physical hazard classes

No data available.

Further safety characteristics (supplemental)

Other Information: REFRACTIVE INDEX: 1.4075 (20 °C)

DIELECTRICITY CONSTANT: 14.7 (20 °C)

EL. DIPOLE MOMENT: 1.7 Debye (20 °C)

TASTE: Pungent

SECTION 10: Stability and reactivity

Reactivity

Risk of ignition. Vapours may form explosive mixtures with air

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

Contact with strong oxidising agents increases the risk of fire and explosion. Contact with reducing agents and hydrogen trisulfide causes a vigorous reaction and explosion.

Conditions to avoid

Light. Heat, flames, ignition sources and incompatibles.

Incompatible materials

Strong oxidising agents, acid chlorides, acid anhydrides, alkali metals, alkaline earth metals, fluorine, oxygen and reducing agents.

Hazardous decomposition products

Oxides of carbon. May produce acrid smoke and irritating fumes when heated to decomposition.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Acute Toxicity - Oral: LD50 (rat): > 5000 mg/kg.

Ingestion: May be harmful if swallowed. Absorption of large quantities may cause the following symptoms: weakness, pain, burning sensations in the chest and stomach, abdominal pain, headache, dizziness, nausea, CNS disorders, feeling of drunkenness or intoxication, inability to move, unconsciousness, coma.

Inhalation: Harmful by inhalation. Vapour causes irritation of the mucous membranes in the nose, throat and respiratory tract. Symptoms include of headache, difficulting in breathing, chest pains, coughing, dizziness, nausea, vomiting, feelings of drunkenness and unconsciousness. Exposure to high concentrations may result in a narcotic effect, central nervous system disturbances and death.

Skin corrosion/irritation

Acute Toxicity - Dermal: LD50 (rabbit): > 3000 mg/kg.

May cause skin irritation. Symptoms include redness and pain.

Serious eye damage/irritation

Vapours are irritating to eyes. Contact with liquid may cause severe pain and irritation.

Respiratory or skin sensitization

No data available.

Germ cell mutagenicity

No data available.

Carcinogenicity

No data available.

Reproductive toxicity

No data available.

Summary of evaluation of the CMR properties

No data available.

Specific target organ toxicity (STOT) - single exposure

May cause respiratory irritation.

Specific target organ toxicity (STOT) - repeated exposure

No data available.

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Aspiration hazard

No data available.

Additional information

Chronic Effects: Drying and cracking of the skin may result from repeated or prolonged exposure.

SECTION 12: Ecological information

Toxicity

Acute Toxicity - Fish: LC50 *Oncorhynchus mykiss* (rainbow trout): 700 mg/l; 96 h (IUCLID)

Acute Toxicity - Daphnia: IC50 *Desmodesmus subspicatus* (green algae): 493 mg/l; 72 h (IUCLID)

Persistence and degradability

No data available.

Bioaccumulative potential

Distribution: log P(o/w): 1.35. Bioaccumulation is not expected.

Mobility in soil

No data available.

Results of PBT and vPvB assessment

No data available.

Endocrine disrupting properties

No data available.

Other adverse effects

No data available.

SECTION 13: Disposal considerations

Disposal methods

Product disposal

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers.

Sewage disposal

Distribution: log P(o/w): 1.35. Bioaccumulation is not expected.

Other disposal recommendations

Do not discharge this material into waterways, drains and sewers.

SECTION 14: Transport information

ADG (Road and Rail)

UN Number: 1105

Class: 3

Packing Group: III

Proper Shipping Name: PENTANOLS

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Hazchem emergency action code (EAC)

•3Y

IMDG

UN Number: 1105

Class: 3

Packing Group: III

EMS Number:

Proper Shipping Name: PENTANOLS

IATA

UN Number: 1105

Class: 3

Packing Group: III

Proper Shipping Name: PENTANOLS

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

Australia SUSMP

Poison Schedule: NS

SECTION 16: Other information

Further information/disclaimer

ChemSupply Australia Pty Ltd does not warrant that this product is suitable for any use or purpose. The user must ascertain the suitability of the product before use or application intended purpose. Preliminary testing of the product before use or application is recommended. Any reliance or purported reliance upon ChemSupply Australia Pty Ltd with respect to any skill or judgement or advice in relation to the suitability of this product of any purpose is disclaimed. Except to the extent prohibited at law, any condition implied by any statute as to the merchantable quality of this product or fitness for any purpose is hereby excluded. This product is not sold by description. Where the provisions of Part V, Division 2 of the Trade Practices Act apply, the liability of ChemSupply Australia Pty Ltd is limited to the replacement of supply of equivalent goods or payment of the cost of replacing the goods or acquiring equivalent goods.

Preparation information

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Standard for the Uniform Scheduling of Medicines and Poisons, Commonwealth of Australia

National Road Transport Commission, 'Australian Code for the Transport of Dangerous Goods by Road and Rail 7th. Ed.'

Safe Work Australia, 'National Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals', July 2020.

Safe Work Australia, 'National Guide for Classifying Hazardous Chemicals', July 2020.

Safe Work Australia, Workplace Exposure Standards for Airborne Contaminants, December 2019

Safe Work Australia, Hazardous Chemical Information System (HCIS), hcis.safeworkaustralia.gov.au

IATA, Dangerous Goods Regulations (DGR)

IMO, International Maritime Dangerous Goods Code (IMDG)