

MATERIAL SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Material Name: n-Butyl methacrylate.
Catalogue Number: C042.
Other Names: Butyl methacrylate monomer.
Recommended Use: Monomer.

Supplier Name: ProSciTech
Street Address: 1/11 Carlton Street, Kirwan, Qld. 4817 Australia
Telephone Number: (07) 4773 9444 - 8:30am – 5:00pm, Monday to Friday (excluding Public Holidays)
Emergency Contact: (07) 4773 9444 - 8:30am – 5:00pm, Monday to Friday (excluding Public Holidays)

SECTION 2 - HAZARDS IDENTIFICATION

Hazard Classification:
 Hazardous according to criteria of Hazardous Substances Information System [HSIS Worksafe Australia].

Hazardous and/or Dangerous Nature:
 HAZARDOUS SUBSTANCE. DANGEROUS GOODS.

Risk Phrases:
 R10 Flammable.
 R22 Harmful if swallowed.
 R36/37/38 Irritating to eyes, respiratory system and skin.
 R43 May cause sensitisation by skin contact.
 R50 Very toxic to aquatic organisms.

Safety Phrases:
 S2 Keep out of reach of children.
 S24/25 Avoid contact with skin and eyes.
 S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
 S37/39 Wear suitable gloves and eye/face protection.
 S46 If swallowed, seek medical advice immediately and show this container or label.
 S61 Avoid release to the environment. Refer to special instructions/Material Safety Data Sheets.

Refer to Section 15 for Poisons Schedule.

SECTION 3 - COMPOSITION /INFORMATION ON INGREDIENTS

Pure Substance (Proportion 100%):

Chemical Identity: n-Butyl methacrylate.
Common Name(s): Butyl methacrylate monomer.
CAS Number): Mixture – see below

Mixture Substance:

Ingredients	Cas Number(s)	Proportion (%)
n-Butyl methacrylate	97-88-1	99
Isobutyl methacrylate	97-86-9	< 1
Other ester products	-	< 0.7
4-Methoxyphenol	150-76-5	< 0.0015

SECTION 4 - FIRST AID MEASURES

Ingestion: If swallowed, dilute by giving 2 glasses of water to drink. Seek immediate medical aid.
Inhalation: Move subject to fresh air. Give artificial respiration if breathing has stopped. Seek immediate medical aid.
Eye Contact: Flush eyes with a large amount of water for at least 15 minutes. Seek medical attention if irritation persists.
Skin Contact: Wash affected skin areas with soap and water. Seek medical attention if irritation persists.
First Aid Facilities: Eyebath/eyewash, Safety shower & general washroom facilities.
Medical Attention & Special Treatment:
 Not available.
Additional Information:
 Not available.

SECTION 5 - FIRE FIGHTING MEASURES

Suitable Extinguishing Media:

Alcohol foam, CO₂, dry chemical, water spray

Hazards from Combustion Products:

Heat can cause polymerization. Heated containers can explode.

Precautions for Fire Fighters:

Wear self-contained breathing apparatus (pressure-demand, MSHA/NIOSH-approved or equivalent) and full protective gear. Use water spray to cool containers. Fight fire from a protected location - EXPLOSION

HAZARD

Hazchem Code: 3WE

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Emergency Procedures:

Not available.

Containment & Clean up:

Keep spectators away. Eliminate ignition sources. Use self-contained breathing apparatus pressure-demand, MSHA/NIOSH approved or equivalent), impervious clothing and boots. Dyke and contain spill with inert material (e.g., sand, earth). Transfer liquid to containers for recovery or disposal and solid dyking material to separate containers for disposal. Contaminated monomer may be unstable. Add extra inhibitor to prevent polymerization. Remove contaminated clothing promptly and wash affected skin areas with soap and water. Keep spills and cleaning runoffs out of municipal sewers and open bodies of water. Product is slightly toxic to fish.

SECTION 7 - HANDLING & STORAGE

Precautions for Safe Handling:

Wear appropriate protective clothing – refer to Section 8 – when handling. Wash thoroughly after handling. Keep container closed when not in use.

Precautions for Safe Storage:

Store out of direct sunlight at ambient temperatures. Leave air space over liquid surface in all containers. Ground all containers when transferring material. Use within one year of date stamped on label.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards: 4-Methoxyphenol, Cas 150-76-5:
(Worksafe Australia)
TWA 5mg/m³

Biological Limit Values: No biological limit allocated.

Engineering Controls:

Mechanical local exhaust ventilation at point of contaminant release. Use local exhaust ventilation with a minimum capture velocity of 100 ft/min. (30 m/min.) at the point of monomer evolution.

Personal Protective Equipment:

RESPIRATORY PROTECTION:

One required if good ventilation is maintained. Otherwise wear self-contained breathing apparatus (pressure-demand, MSHA/NIOSH approved or equivalent).

PROTECTIVE GLOVES: Impervious

EYE PROTECTION: Chemical splash goggles (ANSI Z-87.1 or approved equivalent)

OTHER PROTECTIVE EQUIPMENT:

Eyewash facility, safety shower, impervious clothing.

SECTION 9 - PHYSICAL & CHEMICAL PROPERTIES

Appearance:	Clear colourless mobile liquid.
Odour:	Mild, sweet odour.
pH:	Not available.
Vapour pressure (mm of Hg at °C):	4.9 at 20°C.
Vapour density:	(AIR=1): > 1
Boiling point/range (°C):	160°C.
Freezing/melting point (°C):	Melts at -50°C.
Solubility:	Negligible solubility in water.
Specific gravity or density:	(WATER=1): 0.90
Flash Point:	49°C.
Flammable (explosive) limits:	Lower limit: 2.0%

Ignition temperature:	Upper limit: 8.0%
Additional Information:	294°C.
Viscosity:	0.92 cps
Percent volatility:	100%
Evaporation rate (bac=1):	< 1.

SECTION 10 - STABILITY AND REACTIVITY

Chemical stability:	Stable under normal conditions of use.
Conditions to avoid:	Heat, aging, contamination, incompatible materials.
Incompatible Materials:	Oxidizing or reducing agents.
Hazardous Decomposition Products:	None known – but may occur.
Hazardous Reactions:	May occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

Exposure and Health Effects:	Is irritating to eyes and skin. Can cause headache, nausea, drowsiness and unconsciousness.
Ingestion:	None known.
Inhalation:	Vapour or mist can irritate the nose and throat. Extended exposure will lead to headache, nausea, drowsiness and unconsciousness.
Eye Contact:	Moderately irritating to eyes.
Skin Contact:	Slightly irritating to skin. Substance can cause allergic reaction on skin.
Human/Animal data:	Acute oral LD50, rat: 20,300 mg/kg; Acute dermal LD50, rabbit: 10,200 mg/kg; Acute inhalation LC50, rat: >2,900 ppm for 8 hours.
Carcinogenic Category:	Not classified as a Carcinogen by the IARC.
Other Carcinogenic Information:	Not available.

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity:	Keep spills and cleaning runoffs out of municipal sewers and open bodies of water. Product is slightly toxic to fish.
Persistence and degradability:	Not available.
Mobility:	Not available.
Additional Information:	Not available.

SECTION 13 - DISPOSAL CONSIDERATIONS

Disposal Methods:	Dispose of in accordance with Federal, State and Local regulations.
Special Precautions/Additional Information:	Not available.

SECTION 14 - TRANSPORT INFORMATION

UN Number:	UN2227
UN Proper Shipping Name:	n-Butyl methacrylate, stabilized.
Class and Subsidiary risk:	3
Packing Group:	PG III
Special Precautions for User:	Not available.
Hazchem Code:	3WE

SECTION 15 - REGULATORY INFORMATION

Poison Schedule Number:	None Allocated.
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SECTION 16 - OTHER INFORMATION

Date of preparation of MSDS: October 10

Comments:

List of Publications referenced when creating this MSDS;

- Hazardous Substances Information System Consolidated Lists: Safe Work Australia.
- APPROVED CRITERIA FOR CLASSIFYING HAZARDOUS SUBSTANCES [NOHSC:1008(2004)] 3rd Edition: National Occupational Health and Safety Commission.
- Dangerous Goods - Initial Emergency Response Guide (SAA/SNZ HB76:1997).
- IATA Dangerous Goods Regulations.
- Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995)].
- Australia Standard for the Uniform Scheduling of Drugs and Poisons [SUSPD] (Australian Government Department of Health and Ageing).

This Material Safety Data Sheet (MSDS) has been prepared in compliance with the National code of Practice for the Preparation of Material Safety Data Sheets 2nd Edition [NOHSC:2011(2003)]. It is the user's responsibility to determine the suitability of this information for adoption of necessary safety precautions. The information published in this MSDS has been compiled from the publications listed in Section 16: to the best of our ability and knowledge these publications are considered accurate. We reserve the right to revise Material Safety Data Sheets as new information becomes available. Copies may be made for non-profit use.

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