

1 Identification

Product identifier

Trade name: 84P3 - Acryform Mono

Recommended use and restrictions on use

General use: Acrylic monomer for orthopedic procedures,
Use with 84A3 - Acryform Poly.
Reserved for industrial and professional use.

Initial supplier identifier

Company name: Otto Bock HealthCare Canada Ltd.

Street/POB-No.: 5470 Harvester Road

Postal code, city: Burlington, ON L7L 5N5, CA
Canada

WWW: www.ottobock.ca

Email: info.canada@ottobock.com

Telephone: (800) 665-3327

Telefax: (800) 463-3659

Department responsible for information:

Mark Agro, Telephone: (800) 665-3327 (9 am - 5 pm)

Additional information:

Corporate headquarters:
Ottobock SE & Co. KGaA
Max-Näder-Straße 15
Duderstadt
Germany

Emergency telephone number

COLLECT, Telephone: (613) 996-6666

Transport:

CONSULTANK Lutz Harder GmbH (Contract QUALI003)

Telephone: +49 (0)178-4337434 (from USA: 01149 178 4337434)

2 Hazard identification

Classification

Flammable Liquid 2

Highly flammable liquid and vapour.

Skin Irritation 2

Causes skin irritation.

Sensitization - skin 1

May cause an allergic skin reaction.

Specific Target Organ Toxicity (Single Exposure) 3 May cause respiratory irritation.

Information elements

Symbols:



Signal word:

Danger

Hazard statements:

- Highly flammable liquid and vapour.
- Causes skin irritation.
- May cause an allergic skin reaction.
- May cause respiratory irritation.

Precautionary statements:

- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Avoid breathing mist/vapours/spray.
- Wash hands and face thoroughly after handling.
- Wear protective gloves/protective clothing/eye protection.
- Call a POISON CENTER/doctor if you feel unwell.
- Take off contaminated clothing and wash it before reuse.
- Store in a well-ventilated place. Keep cool.

Other hazards known to the supplier with respect to the product

vapours irritate eyes and respiratory system. Pulmonary edema is possible.
High concentrations of vapour or inhalation for an extended period may lead to paralysis of the central nervous system.
Potentially explosive mixtures may form if adequate ventilation is not provided.
Special danger of slipping by leaking/spilling product.

3 Composition/Information on ingredients

Mixture

Hazardous ingredients:

CAS No.	Designation	Content	Classification
CAS 80-62-6	Methyl methacrylate	50 - 100 %	Flammable Liquid 2. Skin Irritation 2. Sensitization - skin 1. Specific Target Organ Toxicity (Single Exposure) 3.
CAS 8002-74-2	Paraffin	2.5 - 10 %	not classified
CAS 3077-12-1	2,2'-[(4-Methylphenyl)imino]bisethanol	< 1 %	Acute Toxicity 4 (oral). Eye Damage 1. Sensitization - skin 1. Aquatic toxicity - chronic 3.

The actual concentration or concentration range is withheld as a trade secret.

4 First-aid measures

Description of necessary first-aid measures

General information: If medical advice is needed, have product container or label at hand. Take off immediately all contaminated clothing and wash it before reuse.

In case of inhalation: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek medical attention if problems persist.

In case of swallowing: Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person. Do not induce vomiting. Seek medical attention.

In case of skin contact: Immediately clean with water and soap followed by thorough rinsing. In case of skin reactions, consult a physician.

In case of eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. Subsequently consult an ophthalmologist.

Most important symptoms and effects, whether acute or delayed

May cause respiratory irritation. Causes skin irritation.

May cause an allergic skin reaction.

The following symptoms may occur: Mucous membrane irritation, Cough and shortage of breath.

High concentrations of vapour or inhalation for an extended period may lead to paralysis of the central nervous system. Pulmonary edema is possible.

In case of prolonged or frequent exposure eye irritation may occur.

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

Monitor breathing. Treat symptomatically.

If spray contacts eyes, immediately and thoroughly flush eyes with water; profitable is the application of isotonic eye rinse. Seek the attention of an ophthalmologist immediately.

On irritation of the respiratory system use an aerosol dispenser and treat with 5 doses of dexamethasone aerosol (e.g. Auxiloson, Thomae) every 10 minutes until symptoms cease.

Estimated lethal dose: 30g

5 Fire-fighting measures

Suitable and unsuitable extinguishing media

Suitable extinguishing media:

Water spray jet, carbon dioxide, extinguishing powder, alcohol resistant foam

Unsuitable extinguishing media:

Water spray jet

Specific hazards arising from the product

Highly flammable liquid and vapour. Flammable mixtures may form in the air when product is heated above the flash point and/or during spraying.

Hazardous vapours may form during fires.

Furthermore, there may develop: nitrogen oxides (NOx), carbon monoxide and carbon dioxide

Special protective equipment and precautions for fire-fighters

Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information:

Heating will lead to pressure increase: danger of bursting and explosion.

Cool endangered containers with water spray and, if possible, remove from danger zone.

Do not allow fire water to penetrate into surface or ground water.

In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Eliminate all ignition sources if safe to do so. Provide adequate ventilation.
Avoid contact with skin and eyes.
Wear appropriate protective equipment. Do not breathe mist/vapours/spray. Take off immediately all contaminated clothing and wash it before reuse.
Keep unprotected people away.
Cordon off downwind area at risk and warn inhabitants.

Environmental precautions:

Do not allow to enter into ground-water, surface water or drains.
Danger of explosion!
In case of release, notify competent authorities.

Methods and material for containment and cleaning up

Take up with non-flammable, liquid binding material (e.g. sand/earth/diatomaceous earth/vermiculit) and perform disposal according to instructions. Final cleaning.
Never return spills in original containers for re-use.

Additional information:

Take precautionary measures against static discharges.
In case of handling larger quantities: Use explosion-proof equipment and non-sparking tools/utensils.
Special danger of slipping by leaking/spilling product.

7 Handling and storage

Precautions for safe handling

Advices on safe handling: Provide adequate ventilation, and local exhaust as needed. Do not breathe mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Wear appropriate protective equipment.
Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Take off immediately all contaminated clothing and wash it before reuse.
Guarantee sufficient ventilation during and after use, in order to prevent vapour accumulation.
When handling large quantities, supply emergency spray.

Precautions against fire and explosion:

Keep away from sources of ignition - No smoking.
Take precautionary measures against static discharges.
In case of fire, cool endangered containers with water.
Flammable mixtures may form in the air when product is heated above the flash point and/or during spraying.
Use only explosion-proof equipment. Do not weld.

Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:

Keep container tightly closed in a cool, well-ventilated place. Keep container dry.
Keep only in original container. Protect from heat and direct sunlight.
Store containers in upright position.

Hints on joint storage:

Keep away from food, drink and animal feedingstuffs.
Do not store together with: oxidizing agents

8 Exposure controls/Personal protection

Control parameters

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
80-62-6	Methyl methacrylate	Canada: Alberta, OEL 15 min	410 mg/m ³ ; 100 ppm
		Canada: Alberta, OEL 8 hour	205 mg/m ³ ; 50 ppm
		Canada: BC, OEL STEL	100 ppm
		Canada: BC, OEL TWA	50 ppm
		Canada: Québec, VECD	100 ppm
		Canada: Québec, VEMP	50 ppm
8002-74-2	Paraffin	Canada: Alberta, OEL 8 hour	2 mg/m ³
		Canada: BC, OEL TWA	2 mg/m ³
		Canada: Québec, VEMP	2 mg/m ³

Appropriate engineering controls

Provide good ventilation and/or an exhaust system in the work area. Do not allow containers to stand open.

Take precautionary measures against static discharges.

Individual protection measures, such as personal protective equipment

Respiratory protection: Respiratory protection must be worn whenever the TLV (WEL) levels have been exceeded. Use filter type A (= against vapours of organic substances) according to OSHA Standard - 29 CFR: 1910.134 or ANSI Z88.2.

Hand protection: Protective gloves according to OSHA Standard - 29 CFR: 1910.138.
Glove material: Butyl caoutchouc (butyl rubber)
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Eye protection: Tightly sealed goggles according to OSHA Standard - 29 CFR: 1910.133 or ANSI Z87.1-2010.

Body protection: Wear suitable protective clothing.
In case of handling larger quantities: Flame retardant, antistatic and chemical resistant protective clothing.

General hygiene considerations:
Do not breathe mist/vapours/spray. Do not get in eyes, on skin, or on clothing.
Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Take off immediately all contaminated clothing and wash it before reuse.
Guarantee sufficient ventilation during and after use, in order to prevent vapour accumulation.
When handling large quantities, supply emergency spray.

Environmental exposure controls

Refer to 6.: Section "Environmental precautions".

9 Physical and chemical properties

Information on basic physical and chemical properties

Physical state at 20 °C and 101.3 kPa	liquid
Colour:	colourless clear
Odour:	Stinging
Odour threshold:	No data available
Melting point and freezing point:	-48 °C
Boiling point or initial boiling point and boiling range:	101 °C
Flammability:	Highly flammable liquid and vapour.
Lower and upper explosion limit or lower and upper flammability limit:	LEL (Lower Explosion Limit): 2.10 Vol-% UEL (Upper Explosive Limit): 12.50 Vol-%
Flash point/flash point range:	10 °C
Evaporation rate:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
pH:	No data available
Water solubility:	at 20 °C: 1.6 g/L
Partition coefficient — n-octanol/water:	No data available
Vapour pressure:	at 20 °C: 47 hPa
Density and/or relative density	No data available
Vapour density:	No data available
Particle characteristics:	Not applicable

Additional information

Explosive properties:	Not explosive. vapours may form explosive mixtures with air.
Ignition temperature:	430 °C
Solid content:	0 %

10 Stability and reactivity

Reactivity:	Highly flammable liquid and vapour.. vapours may form explosive mixtures with air.
Chemical stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions:	Heating will lead to pressure increase: danger of bursting and explosion. Polymerization along with heat production. Reactions with strong oxidizing agents
Conditions to avoid:	Keep away from heat sources, sparks and open flames. Protect from direct sunlight.
Incompatible materials:	Oxidizing agents

Hazardous decomposition products:

No hazardous decomposition products when regulations for storage and handling are observed.

11 Toxicological information

Information on the likely routes of exposure

No data available

Health hazard information

Acute toxicity (oral): Lack of data.

Acute toxicity (dermal): Lack of data.

Acute toxicity (inhalative): Lack of data.

Skin corrosion/irritation: Skin Irritation 2 = Causes skin irritation.

Serious eye damage/irritation: Lack of data.

Sensitisation to the respiratory tract: Based on available data, the classification criteria are not met.

Skin sensitisation: Sensitization - skin 1 = May cause an allergic skin reaction.

Germ cell mutagenicity/Genotoxicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

Effects on or via lactation: Lack of data.

Specific target organ toxicity (single exposure): Specific Target Organ Toxicity (Single Exposure) 3 = May cause respiratory irritation.

Specific target organ toxicity (repeated exposure): Based on available data, the classification criteria are not met.

Aspiration hazard: Based on available data, the classification criteria are not met.

Acute toxicity:

LD50 Rat, oral: (Methyl methacrylate) 7,900 mg/kg

Other information:

Information about Methyl methacrylate (CAS No. 80-62-6):

LD50 Rat, oral: 7,872 mg/kg

Symptoms

In case of inhalation: Cough and shortage of breath.

In case of ingestion:

Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.

After resorption of toxic quantities: CNS disorders, drowsiness, amyosthenia, coma, liver and kidney damage.

12 Ecological information

Ecotoxicity

Further details:

Do not allow to penetrate into soil, waterbodies or drains.

Persistence and degradability

Further details: No data available

Bioaccumulative potential

Partition coefficient — n-octanol/water:

No data available

Mobility in soil

No data available

Other adverse effects

General information: Do not allow to penetrate into soil, waterbodies or drains.

13 Disposal considerations

Waste treatment methods

Product

Recommendation: Dispose of waste according to applicable legislation.

Package

Recommendation: Dispose of waste according to applicable legislation.
Handle contaminated packages in the same way as the substance itself.
Non-contaminated packages may be recycled.

14 Transport information

UN number

TDG: UN1247

IMDG, IATA-DGR: UN 1247

UN proper shipping name

TDG, IMDG, IATA-DGR: UN 1247, METHYL METHACRYLATE MONOMER, STABILIZED

Transport hazard class

TDG: 3

IMDG: Class 3, Subrisk -

IATA-DGR: Class 3



Packing group

TDG, IMDG, IATA-DGR: II

Environmental hazards

Marine pollutant: no

Special precautions in connection with transport or conveyance either within or outside the premises

Canada: Transportation of Dangerous Goods (TDG)

Special Provisions: 155
Explosive limit and limited quantity index: 1L
Passenger carrying road or rail index: 5L

Sea transport (IMDG)

EmS: F-E, S-D
Special Provisions: 386
Limited quantities: 1 L
Excepted quantities: E2
Package - Instructions: P001
Package - Provisions: -
IBC - Instructions: IBC02
IBC - Provisions: -
Tank instructions - IMO: -
Tank instructions - UN: T4
Tank instructions - Provisions: TP1
Stowage and handling: Category C. SW1 SW2
Properties and observations: Colourless, volatile liquid. Flashpoint: 8°C c.c. Explosive limits: 1.5% to 11.6%. Immiscible with water, Irritating to skin, eyes and mucous membranes.
Marine pollutant: no
Segregation group: none

Air transport (IATA)

Proper shipping name: UN 1247, METHYL METHACRYLATE MONOMER, STABILIZED
Hazard label: Flamm. liquid
Excepted Quantity Code: E2
Passenger and Cargo Aircraft: Ltd.Qty.: Pack.Instr. Y341 - Max. Net Qty/Pkg. 1 L
Passenger and Cargo Aircraft: Pack.Instr. 353 - Max. Net Qty/Pkg. 5 L
Cargo Aircraft only: Pack.Instr. 364 - Max. Net Qty/Pkg. 60 L
Special Provisions: A209
Emergency Response Guide-Code (ERG): 3L

15 Regulatory information

National regulations - Canada

Methyl methacrylate: DSL: listed
Priority Substances List: listed (PSL 1)
Paraffin: DSL: listed
2,2'-[(4-Methylphenyl)imino]bisethanol: DSL: listed

Further regulations, limitations and legal requirements

No data available

16 Other information

Text for labelling:	Contains: Methyl methacrylate 2,2'-[(4-Methylphenyl)imino]bisethanol
Revision date:	17/12/2025
Date of first version:	15/5/1999
Reason of change:	General revision: Safety Data Sheet according to Hazardous Products Regulations (HPR) 2022
Classification procedure:	Physical hazards: on basis of test data Health hazards, environmental hazards: calculation method
Abbreviations and acronyms:	<p>Acute Toxicity: Acute toxicity</p> <p>Aquatic toxicity - chronic: Hazardous to the aquatic environment - chronic</p> <p>AS/NZS: Australian Standards/New Zealand Standards</p> <p>CAS: Chemical Abstracts Service</p> <p>CFR: Code of Federal Regulations</p> <p>CLP: Classification, Labelling and Packaging</p> <p>CNS: Central Nervous System</p> <p>DMEL: Derived minimal effect level</p> <p>DNEL: Derived no-effect level</p> <p>DSL: Domestic Substances List</p> <p>EC: European Community</p> <p>EmS: Emergency Response Procedures for Ships Carrying Dangerous Goods</p> <p>EN: European Standard</p> <p>EQ: Excepted quantities</p> <p>Eye Damage: Eye damage</p> <p>Flammable Liquid: Flammable liquid</p> <p>IATA: International Air Transport Association</p> <p>IATA-DGR: International Air Transport Association – Dangerous Goods Regulations</p> <p>IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk</p> <p>IMDG Code: International Maritime Dangerous Goods Code</p> <p>IMO: International Maritime Organization</p> <p>LD50: Lethal dose 50%</p> <p>LEL: Lower Explosion Limit</p> <p>MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships</p> <p>OEL: Occupational Exposure Limit Value</p> <p>OSHA: Occupational Safety and Health Administration</p> <p>PBT: Persistent, bioaccumulative and toxic</p> <p>PNEC: Predicted no-effect concentration</p> <p>PSL: Priority Substances List</p> <p>Sensitization - skin: Skin sensitisation</p> <p>Skin Irritation: Skin irritation</p> <p>STOT SE: Specific target organ toxicity - single exposure</p> <p>TDG: Transportation of Dangerous Goods Regulation in Canada</p> <p>TLV: Threshold Limit Value</p> <p>TRGS: Technical Rules for Hazardous Substances</p> <p>UN: United Nations</p> <p>vPvB: Very persistent and very bioaccumulative</p> <p>WEL: Workplace Exposure Limit</p>

Department issuing data sheet

Contact person: see section 1: Department responsible for information

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.