

Printing date 10.05.2023 Version number 4 Revision: 10.05.2023

1 Identification of the substance or mixture and of the supplier

- · Product identifier
- · Trade name: SR Ivocap High Impact Monomer
- $\cdot \textit{Relevant identified uses of the substance or \textit{mixture and uses advised against}}$

No further relevant information available.

- · Application of the substance / the mixture Denture base material
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Ivoclar Vivadent AG Bendererstrasse 2 9494 Schaan

PRINCIPALITY OF LIECHTENSTEIN
Tel: +423 235 35 35 / Fax: +423 235 33 60

Importer:

Ivoclar Vivadent Ltd.

12 Omega St, Rosedale, Auckland

New Zealand

Tel: + 64 9 914 9999 / Fax: + 64 9 914 9990

· Further information obtainable from:

Regulatory Affairs

sds@ivoclarvivadent.com

· Emergency telephone number: 0800 764 766 (National Poison Centre - 24 hours / 7 days)

2 Hazards identification

· Classification of the substance or mixture

Flam. Liq. 2 H225 Highly flammable liquid and vapour.

Skin Irrit. 2 H315 Causes skin irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

STOT SE 3 H335 May cause respiratory irritation.

- · Label elements
- · GHS label elements

The product is classified and labelled according to the Globally Harmonised System (GHS).

· Hazard pictograms





GHS02

GHS07

- · Signal word Danger
- · Hazard-determining components of labelling:

methyl methacrylate

ethylene glycol dimethacrylate

· 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.

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

Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- · Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.

3 Composition/Information on ingredients

- · Chemical characterisation: Mixtures
- · Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:			
CAS: 80-62-6	5	methyl methacrylate	50-100%
EINECS: 201		Flam. Liq. 2, H225; Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT SE 3, H335	
CAS: 97-90-5		ethylene glycol dimethacrylate	2.5-10%
EINECS: 202	?-617-2	Skin Sens. 1, H317; STOT SE 3, H335	

[·] Additional information: For the wording of the listed hazard phrases refer to section 16.

4 First aid measures

- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation:

Supply fresh air; consult doctor in case of complaints.

In case of unconsciousness place patient stably in side position for transportation.

- · After skin contact: Immediately rinse with water.
- · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

- · Information for doctor:
- Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire fighting measures

- · Suitable extinguishing agents: CO2, sand, extinguishing powder. Do not use water.
- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Protective equipment: No special measures required.
- · Additional information Cool endangered receptacles with water spray.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away.

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- Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- · Handling:
- · Precautions for safe handling

Only adequately trained personnel should handle this product.

Ensure good ventilation/exhaustion at the workplace.

· Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- · Storage:
- · Requirements to be met by storerooms and receptacles:

Store only in the original receptacle.

Store in a cool location.

- Information about storage in one common storage facility: Store away from oxidising agents.
- Further information about storage conditions:

Store receptacle in a well ventilated area.

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

· Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

· Additional information about design of technical facilities: No further data; see item 7.

Ingredients with limit values that require monitoring at the workplace:

CAS: 80-62-6 methyl methacrylate

WES Short-term value: 416 mg/m³, 100 ppm Long-term value: 208 mg/m³, 50 ppm skin, dsen

- · Additional information: The lists valid during the making were used as basis.
- · Personal protective equipment:
- · General protective and hygienic measures:

Usual hygienic measures for dental practice and dental laboratories.

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Immediately remove all soiled and contaminated clothing

Avoid contact with the eyes and skin.

· Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· Recommended filter device for short term use:

Filter A1

Filter A2

Filter A3

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· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

Butyl rubber, BR

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Not suitable are gloves made of the following materials:

 $Commercial\ medical\ gloves\ do\ not\ provide\ protection\ against\ the\ sensitizing\ effect\ of\ methacrylates.$

· Eye protection:



Tightly sealed goggles

9 Physical and chemical properties

- · General Information
- · Appearance:

Form: Fluid
Colour: Colourless
Odour: Pungent
Odour threshold: Not determined.
pH-value: Not determined.

· Change in condition

Melting point/freezing point: -48 °C
 Initial boiling point and boiling range: 101 °C
 Flash point: 10 °C
 Ignition temperature: 430 °C

· Auto-ignition temperature: Product is not selfigniting.

• Explosive properties: Product is not explosive. However, formation of explosive air/

vapour mixtures are possible.

· Explosion limits:

Lower: 2.1 Vol %
Upper: 12.5 Vol %
Vapour pressure at 20 °C: 47 hPa
Density at 20 °C: 0.943 g/cm³
Relative density Not determined.
Vapour density Not determined.
Evaporation rate Not determined.

· Solubility in / Miscibility with

• water at 20 °C: 1.6 g/l

· Partition coefficient: n-octanol/water: Not determined.

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Viscosity:
Dynamic:
Kinematic:
Not determined.
Not determined.

• *Other information No further relevant information available.*

10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability Stable under normal handling and storage conditions.
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions

Forms explosive gas mixture with air.

Reacts with strong oxidising agents.

Exothermic polymerisation.

- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: None under normal conditions of storage and use.

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity Based on available data, the classification criteria are not met.
- · LD/LC50 values relevant for classification:

CAS: 80-62-6 methyl methacrylate

Oral LD50 7872 mg/kg (rat)

· Skin corrosion/irritation

Causes skin irritation.

- · Serious eye damage/irritation Based on available data, the classification criteria are not met.
- · Respiratory or skin sensitisation

May cause an allergic skin reaction.

- · Germ cell mutagenicity 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.
- · STOT-single exposure

May cause respiratory irritation.

- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard Based on available data, the classification criteria are not met.
- · Additional toxicological information: No further relevant information available.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behaviour in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.

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- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage

- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · **vPvB**: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

UN-Number	
NZS/RID/ADN, IMDG, IATA	UN1247
UN proper shipping name	
NZŜ/RÎD/ADÑ	1247 METHYL METHACRYLATE MONOMER, STABILIZED
IMDG, IATA	METHYL METHACRYLATE MONOMER, STABILIZED
Transport hazard class(es)	
NZS/RID/ADN	
Class	3 (F1) Flammahla liquids
Class Label	3 (F1) Flammable liquids.
IMDG, IATA	
Class	3 Flammable liquids.
Label	3
Packing group NZS/RID/ADN, IMDG, IATA	II
Environmental hazards: Marine pollutant:	No
Special precautions for user Hazard identification number (Kemler code):	Warning: Flammable liquids. 339

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Hazchem or Emergency Action Code:	3YE	
EMS Number:	F-E,S-D	
Transport in bulk according to Annex II of M	Marpol	
and the IBC Code	Not applicable.	
Transport/Additional information:		
NZS/RID/ADN		
Limited quantities (LQ)	IL	
Excepted quantities (EQ)	Code: E2	
	Maximum net quantity per inner packaging: 30 ml	
	Maximum net quantity per outer packaging: 500 ml	
Transport category	2	
Tunnel restriction code	D/E	
IMDG		
Limited quantities (LQ)	1L	
Excepted quantities (EQ)	Code: E2	
· -	Maximum net quantity per inner packaging: 30 ml	
	Maximum net quantity per outer packaging: 500 ml	
UN "Model Regulation":	UN 1247 METHYL METHACRYLATE MONOMER,	
	STABILIZED, 3, II	

15 Regulatory information

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

· New Zealand Inventory of Chemicals

All ingredients are listed.

· HSNO Approval numbers

CAS: 80-62-6 methyl methacrylate

HSR001195

· GHS label elements

The product is classified and labelled according to the Globally Harmonised System (GHS).

· Hazard pictograms





GHS02

· Signal word Danger

· Hazard-determining components of labelling:

methyl methacrylate

ethylene glycol dimethacrylate

· 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 dust/fume/gas/mist/vapours/spray.

Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

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IF INHALED: Remove person to fresh air and keep comfortable for breathing. Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · Seveso category P5c FLAMMABLE LIQUIDS
- Qualifying quantity (tonnes) for the application of lower-tier requirements 5000 t
- · Qualifying quantity (tonnes) for the application of upper-tier requirements 50000 t
- · National regulations:
- · Other regulations, limitations and prohibitive regulations

The product is a medical device according to the Directive 93/42/EEC.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

H225 Highly flammable liquid and vapour.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

· Contact:

· Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids – Category 2 Skin Irrit. 2: Skin corrosion/irritation – Category 2

Skin Sens. 1: Skin sensitisation - Category 1

STOT SE 3: Specific target organ toxicity (single exposure) - Category 3