



**Safety Data Sheet
according to WHS Regulations**

Date of issue: 15.05.2025

Version number 4

Revision: 15.05.2025

Hazardous according to criteria of Australian Safety and Compensation Council.

1 Identification

· **Other means of identification**

· Trade name: **Paladon 65 liquid**

· **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.

· **Application of the substance / the mixture** Manufacture of dental prothesis

· **Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**
Kulzer Australia Pty Ltd
Unit 20, 53 Lorraine St
PEAKHURST NSW 2210
Australia

Tel: +61 (02) 9153 0311

· **Informing department:** see above

· **Emergency telephone number:**
Poison Information Number: Australia 13 11 26 & New Zealand 0800 764 766

2 Hazard(s) Identification

· **Classification of the substance or mixture**

Flammable liquids – Category 2

H225 Highly flammable liquid and vapour.

Skin corrosion/irritation – Category 2

H315 Causes skin irritation.

Skin sensitisation – Category 1

H317 May cause an allergic skin reaction.

Specific target organ toxicity (single exposure) –
Category 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 (>90 %)

Tetramethylene dimethacrylate (≥1-≤5 %)

· **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/sparks/open flames/hot surfaces. No smoking.

Do not breathe dust/fume/gas/mist/vapours/spray.

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Wear protective gloves / eye protection.
Wear protective clothing.
If skin irritation or rash occurs: Get medical advice/attention.

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

3 Composition and Information on Ingredients

- **Chemical characterisation: Mixtures**
 - **Description:** Product based on methacrylates

· **Dangerous components:**

80-62-6	methyl methacrylate Flammable liquids – Category 2, H225 Skin corrosion/irritation – Category 2, H315; Skin sensitisation – Category 1, H317; Specific target organ toxicity (single exposure) – Category 3, H335	>90%
2082-81-7	Tetramethylene dimethacrylate Skin sensitisation – Category 1B, H317	≥1-≤5%
99-85-4	p-Mentha-1,4-diene Flammable liquids – Category 3, H226 Reproductive toxicity – Category 2, H361	<1%

- **Additional information** For the wording of the listed hazard phrases refer to section 16.

4 First Aid Measures

- **After inhalation** Supply fresh air; consult doctor in case of symptoms.
- **After skin contact** Instantly wash with water and soap and rinse thoroughly.
- **After eye contact** Rinse opened eye for several minutes under running water.
- **After swallowing**
Rinse out mouth and then drink plenty of water.
In case of persistent symptoms consult doctor.
- **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.
- **Special hazards arising from the substance or mixture**
Can form explosive gas-air mixtures.
Formation of toxic gases is possible during heating or in case of fire.
- **Protective equipment:** No special measures required.

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· **Additional information -**

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6 Accidental Release Measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:** Prevent material from reaching sewage system, holes and cellars.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (diatomite, universal binders, for small amounts tissues).
Do not flush with water or aqueous cleansing agents
Send for recovery or disposal in suitable containers.
- **Reference to other sections**
See Section 13 for information on disposal.
See Section 8 for information on personal protection equipment.

7 Handling and Storage

- **Handling**
 - **Precautions for safe handling**
Keep containers tightly sealed.
Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).
 - **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **Storage**
 - **Requirements to be met by storerooms and containers:** Store in cool location.
 - **Information about storage in one common storage facility:** Not required.
 - **Further information about storage conditions:**
Store cool (not above 25 °C).
Store in cool, dry conditions in well sealed containers.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls and personal protection

- **Appropriate engineering controls** No further data; see section 7.

- **Components with critical values that require monitoring at the workplace:**

80-62-6 methyl methacrylate

WES	Short-term value: 416 mg/m ³ , 100 ppm Long-term value: 208 mg/m ³ , 50 ppm Sen
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· **DNELs**

80-62-6 methyl methacrylate

Oral	general population, long term, systemic	8.2 mg/Kg (not defined)
Dermal	worker industrial, long term, systemic	13.67 mg/Kg/d (not defined)

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<i>Inhalative</i>	<i>general population, long term, systemic</i>	<i>8.2 mg/Kg/d (not defined)</i>
	<i>worker industrial, acute, local</i>	<i>416 mg/m3 (not defined)</i>
	<i>worker industrial, long term, systemic</i>	<i>348.4 mg/m3 (not defined)</i>
	<i>worker industrial, long term, local</i>	<i>208 mg/m3 (not defined)</i>
	<i>general population, acute, local</i>	<i>208 mg/m3 (not defined)</i>
	<i>general population, long term, systemic</i>	<i>74.3 mg/m3 (not defined)</i>

2082-81-7 Tetramethylene dimethacrylate

<i>Oral</i>	<i>general population, long term, systemic</i>	<i>2.5 mg/Kg (not defined)</i>
	<i>worker industrial, long term, systemic</i>	<i>4.2 mg/Kg/d (not defined)</i>
<i>Dermal</i>	<i>general population, long term, systemic</i>	<i>2.5 mg/Kg/d (not defined)</i>
	<i>worker professional, long term, systemic</i>	<i>14.5 mg/m3 (not defined)</i>
	<i>general population, long term, systemic</i>	<i>4.3 mg/m3 (not defined)</i>

PNECs

80-62-6 methyl methacrylate

<i>freshwater</i>	<i>0.94 mg/l (not defined)</i>
<i>marine water</i>	<i>0.094 mg/l (not defined)</i>
<i>sewage treatment plant</i>	<i>10 mg/l (not defined)</i>
<i>sediment, dry weight, freshwater</i>	<i>10.2 mg/Kg (not defined)</i>
<i>sediment, dry weight, marine water</i>	<i>0.102 mg/Kg (not defined)</i>
<i>soil, dry weight</i>	<i>1.48 mg/Kg (not defined)</i>

2082-81-7 Tetramethylene dimethacrylate

<i>freshwater</i>	<i>0.043 mg/l (not defined)</i>
<i>marine water</i>	<i>0.004 mg/l (not defined)</i>
<i>sewage treatment plant</i>	<i>2 mg/l (not defined)</i>
<i>sediment, dry weight, freshwater</i>	<i>3.12 mg/Kg (not defined)</i>
<i>sediment, dry weight, marine water</i>	<i>0.312 mg/Kg (not defined)</i>
<i>soil, dry weight</i>	<i>0.573 mg/Kg (not defined)</i>

Additional information: The lists that were valid during the compilation were used as basis.

Personal protective equipment

General protective and hygienic measures

- Keep away from foodstuffs, beverages and food.
- Instantly remove any soiled and impregnated garments.
- Wash hands during breaks and at the end of the work.
- Avoid contact with the eyes and skin.

Breathing equipment:

Not necessary with efficient local exhaust. If exposition to vapours is possible, use breathing protective mask (filter A).

Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
If skin contact cannot be avoided, protective gloves are recommended to avoid possible sensitization.

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Solvent resistant gloves

Check protective gloves prior to each use for their proper condition.
recommended

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **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.

· **For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:**

Butyl rubber, BR
Nitrile rubber, NBR

· **Eye protection:** Tightly sealed safety glasses.

· **Body protection:** Light weight protective clothing

9 Physical and Chemical Properties

· **General Information**

· **Appearance:**

· **Form:**

Fluid

· **Colour:**

Colourless

· **Smell:**

Ester-like

· **Odour threshold:**

Not determined.

· **pH-value:**

Mixture is non-soluble (in water).

· **Change in condition**

· **Melting point/freezing point:**

-48 °C

· **Initial boiling point and boiling range:**

100.3 °C

· **Flash point:**

11.5 °C

· **Inflammability (solid, gaseous)**

Not applicable.

· **Auto-ignition temperature:**

430 °C

· **Decomposition temperature:**

Not determined.

· **Self-inflammability:**

Product is not selfigniting.

· **Explosive properties:**

Product is not explosive. However, formation of explosive air/vapour mixtures is possible.

· **Critical values for explosion:**

· **Lower:**

2.1 Vol %

· **Upper:**

12.5 Vol %

· **Steam pressure at 20 °C:**

47 hPa

· **Density at 20 °C**

0.940 g/cm³

· **Relative density**

Not determined.

· **Vapour density**

Not determined.

· **Evaporation rate**

Not determined.

· **Solubility in / Miscibility with**

· **Water:**

Not miscible or difficult to mix

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

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- **Viscosity:**
 - **dynamic at 20 °C:** 1 mPas
 - **kinematic:** Not determined.
- **Solvent content:**
 - **VOC USA** 910.9 g/l / 01.73 lb/gl
 - **VOC EU** 913.2 g/l
- **Other information** No further relevant information available.
 - **Particle characteristics** Not applicable.
 - **Physical state** Liquid

10 Stability and Reactivity

- **Reactivity** No further relevant information available.
- **Conditions to be avoided:** No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** None
- **Additional information:**
If stored longer than recommended and/or above recommended temperature, product may polymerize generating heat.

11 Toxicological Information

- **Information on toxicological effects**
 - **Acute toxicity** Based on available data, the classification criteria are not met.

· **LD/LC50 values that are relevant for classification:**

80-62-6 methyl methacrylate

Oral	LD50	~7,900 mg/kg (rat)
Dermal	LD50	>5,000 mg/kg (guinea pig) (OECD 402)
Inhalative	LC50/4 h	29.8 mg/l (rat)

2082-81-7 Tetramethylene dimethacrylate

Oral	LD50	10,066 mg/kg (rat) (OECD 401)
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99-85-4 p-Mentha-1,4-diene

Oral	LD50	>2,000 mg/kg (rat) (OECD 423)
Dermal	LD50	>2,000 mg/kg (rat) (OECD 402)

- **Primary irritant effect:**
 - **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.

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- **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.

12 Ecological Information

· **Toxicity**

· **Aquatic toxicity:**

80-62-6 methyl methacrylate

EC50/21d	49 mg/L (daphnia) (OECD 211)
EC50/48h	69 mg/l (daphnia) (EPA OTS 797.1300)
NOEC / 21d	37 mg/l (daphnia) (OECD 211)
ErC50 / 72 h	>110 mg/l (algae) (OECD 201)
NOEC / 72h	110 mg/l (algae) (OECD 201)
NOEC / 48h	48 mg/l (daphnia) (EPA OTS 797.1300)
EbC50 / 72h	>110 mg/l (algae) (OECD 201)
NOEC/ 35d	9.4 mg/L (fish) (OECD 210)
LC50/ 35d	33.7 mg/L (fish) (OECD 210)

2082-81-7 Tetramethylene dimethacrylate

EC50/21d	14.1 mg/L (daphnia) (OECD 211)
EC50/48h	32.5 mg/l (fish)
NOEC / 21d	5.09 mg/l (daphnia) (OECD 211)
ErC50 / 72 h	9.79 mg/l (algae) (OECD 201)
NOEC / 72h	2.11 mg/l (algae) (OECD 201)
NOEC / 48h	25 mg/l (fish)
ErC10/72h	4.35 mg/L (algae) (OECD 201)

99-85-4 p-Mentha-1,4-diene

EC50/72h	>10.82 mg/l (algae) (OECD 201)
EC50/48h	10.189 mg/l (daphnia) (OECD 202)
LC50/96h	2.792 mg/l (fish) (OECD 203)

· **Persistence and degradability**

80-62-6 methyl methacrylate

Biodegradation 94 % /14d (not defined) (OECD 301C)

2082-81-7 Tetramethylene dimethacrylate

Biodegradation 84 % /28d (not defined) (OECD 310)

99-85-4 p-Mentha-1,4-diene

Biodegradation 27 % /28d (not defined) (OECD 301F; ISO 9408/ EEC 92/69/V, C.4-D)

· **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:**

Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

· **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 of together with household garbage. Do not allow product to reach sewage system.

Disposal must be made according to official regulations.

· **Uncleaned packagings:**

· **Recommendation:**

Disposal must be made according to official regulations.

Non contaminated packagings can be used for recycling.

14 Transport information

· **UN-Number**

· **ADG, IMDG, IATA**

UN1247

· **UN proper shipping name**

· **ADG**

1247 METHYL METHACRYLATE MONOMER,
STABILIZED solution

· **IMDG, IATA**

METHYL METHACRYLATE MONOMER, STABILIZED
solution

· **Transport hazard class(es)**

· **ADG**



· **Class**

3 (F1) Flammable liquids.

· **Label**

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· **IMDG, IATA**



· **Class** 3 Flammable liquids.
· **Label** 3

· **Packing group**
· **ADG, IMDG, IATA** II

· **Environmental hazards:**
· **Marine pollutant:** No

· **Special precautions for user** Warning: Flammable liquids.
· **Kemler Number:** 339
· **EMS Number:** F-E,S-D
· **Stowage Category** B
· **Stowage Code** SW2 Clear of living quarters.

· **Transport in bulk according to Annex II of Marpol and the IBC Code** Not applicable.

· **Transport/Additional information:** -

· **ADG**

· **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
· **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 SOLUTION, 3, II

15 Regulatory information

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

· **Australian Inventory of Industrial Chemicals**

All ingredients are listed.

· **Australia: Priority Existing Chemicals**

None of the ingredients is listed.

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· **Directive 2012/18/EU**

- **Qualifying quantity (tonnes) for the application of lower-tier requirements 5.000 t**
- **Qualifying quantity (tonnes) for the application of upper-tier requirements 50.000 t**

· **Regulation (EU) No 649/2012**

None of the ingredients are included.

· **National regulations**

The product is subject to classification in accordance with the prevailing version of the regulations on hazardous materials.

· **Other regulations, limitations and prohibitive regulations**

· **AICS - Australian Inventory of Chemical Substances**

All ingredients are listed.

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

16 Other information

These data are based on our present knowledge. However, they 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.
- H226 Flammable liquid and vapour.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H335 May cause respiratory irritation.
- H361 Suspected of damaging fertility or the unborn child.

· **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)
- VOCV: Lenkungsabgabe auf flüchtigen organischen Verbindungen, Schweiz (Swiss Ordinance on volatile organic compounds)
- VOC: Volatile Organic Compounds (USA, EU)
- DNEL: Derived No-Effect Level (REACH)
- PNEC: Predicted No-Effect Concentration (REACH)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- Flammable liquids – Category 2: Flammable liquids – Category 2
- Flammable liquids – Category 3: Flammable liquids – Category 3
- Skin corrosion/irritation – Category 2: Skin corrosion/irritation – Category 2
- Skin sensitisation – Category 1: Skin sensitisation – Category 1
- Skin sensitisation – Category 1B: Skin sensitisation – Category 1B
- Reproductive toxicity – Category 2: Reproductive toxicity – Category 2
- Specific target organ toxicity (single exposure) – Category 3: Specific target organ toxicity (single exposure) – Category 3

- *** Data compared to the previous version altered.**