

mega CRYL HOT
(Liquid)

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier:

Trade name: **megaCRYL HOT Liquid**

1.2 Relevant identified uses of the substance or mixture and uses advised against:

Denture Base Resin, hot-curing acrylic, liquid component of the 2-component acrylic system based on methyl methacrylate (powder and liquid), for the purpose of crafting individual dentures.

1.3 Details of the supplier of the safety data sheet:

Company name: megadental GmbH Seeweg 20 D-63654 Budingen
e-mail: info@megadental.de
Internet: www.megadental.de Murat Buyuk +49 (0) 6042
Telephone: 9755 0 +49 (0) 6042 9755 20

1.4 Australian Distributor:

Ultimate Dental
660A South Road
MOORABBIN VIC 3189
Tel: 03 9532 1799 Fax: 03 9555 9458
info@ultimatedental.com.au
www.ultimatedental.com.au

1.5 Australian Emergency

13 11 26 (Poisons Hotline 24 hrs / 7 Days)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture:

Classification according to Directive 67/548/EEC or 1999/45/EC

Precautionary statements

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P240 Ground/bond container and receiving equipment.
- P243 Take precautionary measures against static discharge.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Hazard statements

- H224 Extremely flammable liquid and vapour.
- H225 Highly flammable liquid and vapour.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H335 May cause respiratory irritation.

2.2 Label elements:

Hazardous components which must be listed on the label

Methyl methacrylate Signal word: Danger
Pictograms: GHS02-GHS07



Other hazards:

No information available.

E.C. Safety Data Sheet

1907/2006 (REACH)

according with regulation (EC)

megadental GmbH
Seeweg 20
D-63654 Budingen

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SECTION 3: Composition/information on ingredients

3.2. Chemical characterization:

No information available.

Hazardous components:

EC-No. CAS-No. Index-No. REACH-No.	Chemical name Classification according to Directive 67/548/EEC Classification according to Regulation (EC) No. 1272/2008 (CLP)	Quantity
201-297-1 80-62-6 01-2119452498-28	Methyl methacrylate F - Highly flammable, Xi - Irritant R11-37/38-43 Flam. Liq. 1, Skin Irrit. 2, Skin Sens. 1, STOT SE 3; H224 H315 H317 H335	95 - <100 %

Full text of R-, H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures:

General information: Remove contaminated, saturated clothing immediately. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention.

After inhalation: Provide fresh air. When in doubt or if symptoms are observed, get medical advice.

After contact with skin: After contact with skin, wash immediately with polyethylene glycol, followed by plenty of water. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary.

After contact with eyes: After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion: Observe risk of aspiration if vomiting occurs. Rinse mouth immediately and drink plenty of water.

4.2 Most important symptoms and effects, both acute and delayed:

No information available.

4.3 Indication of any immediate medical attention and special treatment needed:

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media:

Carbon dioxide (CO₂), Foam, Extinguishing powder.

Suitable extinguishing media:

Water.

5.2 Special hazards arising from the substance or mixture:

Flammable. Vapours can form explosive mixtures with air.

5.3 Advice for firefighters:

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

Additional information:

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

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SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures:**
Remove all sources of ignition. Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.
- 6.2 Environmental precautions:**
Do not allow uncontrolled discharge of product into the environment. Danger of explosion
- 6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.
- 6.4 Reference to other sections:**
Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling:**
- Advice on safe handling:**
If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.
- Advice on protection against fire and explosion:**
Keep away from sources of ignition. - No smoking. Take precautionary measures against static discharges. Vapours can form explosive mixtures with air
- 7.2 Conditions for safe storage, including any incompatibilities:**
- Requirements for storage rooms and vessels:**
Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Advice on storage compatibility:**
Do not store together with: Oxidising agent. Pyrophoric or self-heating substances.
- 7.3. Specific end use(s):**
Dental prothesis

SECTION 8: Exposure controls/personal protection

8.1 Control parameters:

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
80-62-6	Methyl methacrylate	50	208		TWA (8 h)	WEL
		100	416		STEL (15 min)	WEL

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DNEL/DMEL values

CAS No **Substance**

DNEL type	Exposure route	Effect	Value
80-62-6	Methyl methacrylate		
Worker DNEL, long-term	inhalation		208 mg/m ³
Worker DNEL, long-term	dermal		17 mg/kg bw/day

8.2 Exposure controls:

Appropriate engineering controls If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Protective and hygiene measures: Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

Eye/face protection: Wear eye/face protection.

Hand protection: When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection: Flame-retardant protective clothing. Wear anti-static footwear and clothing

Respiratory protection: In case of inadequate ventilation wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Physical state: liquid Colour:

colourless

Odour: characteristic

Changes in the physical state:

Test method

pH-Value: not determined

Changes in the physical state

Melting point: -48 °C
Initial boiling point and boiling range: 100,5 °C
Flash point: 10 °C

Flammability

Solid: not applicable
Gas: not applicable
Lower explosion limits: 2,1 vol. %
Upper explosion limits: 12,5 vol. %
Ignition temperature: 421 °C

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Auto-ignition temperature

Solid: not applicable
Gas: not applicable
Decomposition temperature: not determined

Oxidizing properties

Not oxidizing.
Vapour pressure: 36 hPa
(at 20 °C)
Density (at 15,5 °C): 0,949 g/cm³
Water solubility: 12,5 g/L
(at 20 °C)

Solubility in other solvents:

not determined
Partition coefficient: 1,38
Viscosity / dynamic:
(at 20 °C) 0,53 mPa-s
Vapour density:
(at 20 °C) 3,5
Evaporation rate: not determined

9.2 Other information:

Solid content: not determined

SECTION 10: Stability and reactivity

- 10.1 Reactivity:** Flammable, Ignition hazard.
- 10.2 Chemical stability:** The product is stable under storage at normal ambient temperatures.
- 10.3 Possibility of hazardous reactions:** No known hazardous reactions.
- 10.4 Conditions to avoid:** Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapours can form explosive mixtures with air.
- 10.5 Incompatible materials:** No information available
- 10.6 Hazardous decomposition products:** No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1 Information on toxicological effects:

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

ATEmix tested

Method	Dose	Species	Source
LD50, oral	7870 mg/kg	Rat	
LD50, dermal	> 5000 mg/kg	Rabbit	
LC50, inhalative (vapour) (4 - 78 mg/lh)	Rat		

CAS No	Chemical name	Method	Dose	Species	Source
80-62-6	Methyl methacrylate				
	oral	LD50	>5000 mg/kg	Rat	OECD401
	dermal	LD50	>5000 mg/kg	Rabbit	
inhalative vapour	LC50	29,8 mg/l	Rat		

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Irritation and corrosivity:	Causes skin irritation.
Sensitising effects:	May cause an allergic skin reaction. (Methyl methacrylate)
STOT-single exposure:	
Severe effects after repeated or prolonged exposure:	May cause respiratory irritation. (Methyl methacrylate)
Carcinogenic/mutagenic/toxic effects for reproduction:	Based on available data, the classification criteria are not met.
Aspiration hazard:	Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met.
Additional information on tests:	This mixture is classified as hazardous according to regulation

(EC) No. 1272/2008 [CLP].

SECTION 12: Ecological information

12.1. Toxicity:

Acute (short-term) fish toxicity

CAS No	Chemical name	Aquatic toxicity	Method	Dose [h] [d]	Species	Source
80-62-6	Methyl methacrylate					
		Acute fish toxicity	LC50	> 79 mg/l 96 h	Oncorhynchus mykiss (Rainbow trout)	OECD 203
		Acute algae toxicity	ErC50	> 110 mg/l 72 h	Selenastrum capricornutum	OECD 201
		Acute crustacea toxicity	EC50	69 mg/l 48 h	Daphnia magna (Big water flea)	OECD 202
		Crustacea toxicity	NOEC	37 mg/l 21 d	Daphnia magna (Big water flea)	OECD 202

Persistence and degradability: Biodegradable.

12.3. Bioaccumulative potential:

On the basis of existing data about the elimination/degradation and bioaccumulation potential longer term damage to the environment is unlikely.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
80-62-6	Methyl methacrylate	1,38

12.4. Mobility in soil: No adsorption in soil or sediment.

12.5. Results of PBT and vPvB assessment:

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

12.6 Other adverse effects:

No information available.

Further information:

Avoid release to the environment.

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SECTION 13: Ecological information

13.1 Waste treatment methods:

Advice on disposal:

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

Waste disposal number of waste from residues/unused products

070208 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of plastics, synthetic rubber and man-made fibres; other still bottoms and reaction residues
Classified as hazardous waste.

Contaminated packaging:

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID):

14.1. UN-number:	UN 1247
14.2. UN proper shipping name:	METHYL METHACRYLATE MONOMER, STABILIZED
14.3. Transport hazard class (es):	3
14.4. Packing group:	II
Hazard label:	3
Classification code:	F1
Limited quantity:	1 L
Transport category:	2
Hazard No:	339
Tunnel restriction code:	D/E

Other applicable information (land transport)

E2

self-accelerating polymerization temperature (SAPT): > 60°C

Inland waterways transport (ADN):

14.1. UN-number:	UN 1247
14.2. UN proper shipping name:	METHYL METHACRYLATE MONOMER, STABILIZED
14.3. Transport hazard class (es):	3
14.4. Packing group:	II
Hazard label:	3
Classification code:	F1
Limited quantity:	1 L

Other applicable information (inland waterways transport)

E2

self-accelerating polymerization temperature (SAPT): > 60°C

Marine transport (IMDG):

14.1. UN-number:	UN 1247
14.2. UN proper shipping name:	METHYL METHACRYLATE MONOMER, STABILIZED
14.3. Transport hazard class (es):	3
14.4. Packing group:	II
Hazard label:	3
Classification code:	F1
Limited quantity:	1 L

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Other applicable information (marine transport)

self-accelerating polymerization temperature (SAPT): E2
> 60°C

Air transport (ICAO):

14.1. **UN-number:**
14.2. **UN proper shipping name:** UN 1247
14.3. **Transport hazard class (es):** METHYL METHACRYLATE MONOMER, STABILIZED
14.4. **Packing group:** 3
Hazard label: II
Classification code: 3
Limited quantity-Passenger: IATA- F1
packing instructions - Passenger: IATA-max. 1 L
quantity - Passenger: 353
IATA-packing instructions - Cargo: 5 L
IATA-max. quantity - Cargo: 364
Other applicable information (air transport) 60 L

Passenger-LQ: E2 Y341 > 60°C
self-accelerating polymerization temperature (SAPT):

14.5. **Environmental hazards:** ENVIRONMENTALLY
HAZARDOUS:

14.6. **Special precautions for user:** no
Warning: Combustible liquids.

14.7. **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:**
not applicable

SECTION 15: Regulatory information

15.1. **Safety, health and environmental regulations/legislation specific for the substance or mixture:**

National regulatory information

Employment restrictions: Observe employment restrictions for young people. Observe employment restrictions for child bearing mothers and nursing.

Water contaminating class (D): 1 - slightly water contaminating

15.2. **Chemical safety assessment:**

Chemical safety assessments for substances in this mixture were not carried out.

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SECTION 16: Other information

Abbreviations and acronyms:

ADR: Accord europeen sur le transport 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 GHS: Globally Harmonized System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%

Relevant P-phrases (Number and full text)

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P240 Ground/bond container and receiving equipment.
P243 Take precautionary measures against static discharge.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Relevant H- and EUH-phrases (Number and full text)

H224 Extremely flammable liquid and vapour.
H225 Highly flammable liquid and vapour.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)

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