

# EU-Safety Data Sheets relating 91/155/EEC number: 161-100

Home Nr.: 161-100 Revised at: 01.2010  
Name in Cmrce. **Orthocryl-liquid, clear / transp. pink / red / green / blue / yellow**  
Version: 1.5 Class of: 01.2010  
Product no.: **160-501-00, 160-502-00, 160-600-00, 161-100-00, 161-127-00, 161-128-00,  
161-129-00, 161-130-00, 161-150-00, 161-300-00, 161-350-00, 161-911-00**  
Code:

## 01. Identification of the Substance and of the Company

### Product Definition

Name in Cmrce.: Orthocryl-liquid, clear / transp.pink / red / green / blue / yellow  
Product-Infos: Methymethacrylate  
Manufacturer: DENTAURUM GmbH & Co. KG  
Turnstraße 31 D-75228 Ispringen

### Information from

Emergency-Info: Chemie  
07231-803-184/190

## 02. Composition/Information on Ingredients

### Chemical Nature:

Methyl methacrylate with dyestuff (when coloured): Colour index (CI)  
red: S.R.111, green: S.G.28, blue: S.B.97, yellow: S.Y.93

CAS: 80-62-6	EG: 607-035-00-6	UN: 1247	EINECS: 2012971
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### Dangerous Contents:

CAS number/Description:	Concentration:	GS:	R Phrases:
80-62-6 Methymethacrylate		F, Xi	11;37/38;43
97-90-5 Ethylene glycol dimethacrylate		Xi	37-43
3077-12-1 N,N-dihydroxyethylene-p-poluidine		Xn	22-41

## 03. Hazards Identification

11 Highly flammable.  
37/38 Irritating to respiratory system and skin.  
43 May cause sensitization by skin contact.

## 04. First-Aid Measures

- First aid measures / general information  
Remove contaminated soaked clothing immediately and dispose of safely.
- First aid measures / inhalation  
Remove the casualty into fresh air and keep him calm.  
Refer for medical treatment.
- First aid measures / skin contact  
In case of contact with skin wash off immediately with soap and water  
Consult a doctor if skin irritation persists.
- First aid measures / eye contact  
In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice
- First aid measures / ingestion  
Summon a doctor immediately.

**05. Fire-fighting Measures**

- Suitable extinguishing media  
foam  
dry powder  
carbon dioxide  
water spray jet
- Extinguishing media that must not be used for safety reasons  
Full water jet
- Special protective equipment for firefighters  
Use breathing apparatus.

**06. Accidental Release Measures**

- environmental precautions  
Do not discharge into the drains/surface waters/groundwater.
- methods for cleaning up/taking up  
Take up residues with absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr).  
Take up mechanically

**07. Handling and Storage**

- Advice on safe handling  
Provide good room ventilation even at ground level (vapours are heavier than air).  
Exhaustion recommended at the workplace
- Advice on protection against fire and explosion  
Keep away from sources of ignition  
Do not smoke.  
Use explosion-proof equipment/fittings and non-sparking tools.
- Requirements for storage rooms and vessels  
Keep only in original container.
- Further information on storage conditions  
Protect from light.  
Do not keep at temperatures above 30°C.

**08. Exposure Controls/Personal Protection**

- Hand protection  
Rubber gloves, recommendation: Dermatril® disposable protective gloves made from a special nitrile compound, powder-free, natural latex-free, thickness 0,1 mm, breakthrough time 5 min.  
REF 162-907-00 (size 7/S), REF 162-908-00 (size 8/M), REF 162-909-00 (size 9/L)
- Eye protection  
goggles
- General protective measures  
Do not inhale vapours  
Avoid contact with eyes and skin
- Hygiene measures  
Remove soiled or soaked clothing immediately.  
Store work clothing separately.

**Ingredients relating to Workplace-Limits to get supervised**

<b>CAS number/Description:</b>	<b>Concentration:</b>	<b>Typ:</b>	<b>Value:</b>
80-62-6 Methyl methacrylate	-	MAK	210,000 mg/m <sup>3</sup> 50,000 ml/m <sup>3</sup>

## 09. Physical and chemical Properties

- Form  
Liquid
- Colour  
colourless  
red  
blue  
green  
pink  
yellow
- Odour  
ester-like
- Changes in physical state 1, solid - liquid and others  
Melting point: -48°C
- Changes in physical state 2, liquid - gaseous and others  
Boiling temperature 100,3°C
- Flash point / method: 10°C (DIN 51755)
- Ignition temperature / method: 430°C (DIN 51794)
- Lower explosion limit / remarks: 2,1 Vol-%
- Upper explosion limit / remarks 12,5 Vol-%
- Vapour pressure at T1 / remarks: 20°C / 40 mbar
- Density / remarks: 20°C 0,94 g/cm<sup>3</sup>
- Relative vapour density determined in air / remarks: >1 20°C
- Solubility in water / remarks: 15,9 g/l (20°C)
- Solubility / other / qualitative  
Soluble in most organic solvents
- Partition coefficient: n-octanol/water / remarks 0,7
- Viscosity / method: 0,6 mPas (20°C) Brookfield

## 10. Stability and Reactivity

- Hazardous reactions  
Reactions with reducing agents, heavy metals.  
Reactions with peroxides and other radical components.  
Polymerisation with evolution of heat.
- Hazardous decomposition products  
No hazardous decomposition products known.
- Thermal decomposition / remarks  
Stable at ambient temperature.

## 11. Toxicological Information

- Acute oral toxicity / species  
Rat: LD 50 >5000 mg/kg
- Acute dermal toxicity / species  
Rabbit: > 5000 mg/kg
- Acute inhalational toxicity / species  
Rat: 7093 ppm 4h
- Irritant effect on skin / validation  
non-irritant 24 h
- Irritant effect on eyes / validation  
non-irritant
- Mutagenicity / validation  
No experimental information on genotoxicity in vitro available.
- Cancerogenicity / validation  
No indications of carcinogenic effects are available from long-term trials.
- Experiences made in practice  
Sensitization through inhalation possible.  
Sensitization through skin contact possible.

**12. Ecological Information**

- Physico-chemical eliminability / other advices  
The product is not readily biodegradable to OECD criteria but is inherently biodegradable.
- Fish toxicity / effective concentration  
LC50 79 mg/l 96h
- Daphnia toxicity / effective concentration  
EC50 69 mg/l 48h
- Algae toxicity / effective concentration  
EC50 37 mg/l 8d
- Bacteria toxicity / species  
Pseudomonas putida 100 mg/l
- General information / ecology  
Do not allow to enter soil, waterways or waste water

**13. Disposal Considerations**

- Disposal / product  
In accordance with regulations for special waste, must be taken after pretreatment to an authorised special waste disposal site or incineration plant  
Waste code no. (only EC): 140603

**14. Transport Information**

- UN 1247
- Land transport / lorry / international / remarks  
1247 Methyl methacrylate, monomer, stabilized
- Land transport / rail / international / remarks  
1247 Methyl methacrylate, monomer, stabilized
- Marine transport / remarks  
Proper shipping name: Methyl methacrylate, monomer, stabilized
- Air transport / remarks  
Proper shipping name: Methyl methacrylate, monomer, stabilized

339	GGVS/E-Class:	3, II	AS-No.:	140603
1247	ADR/RID-Class:	3, II		
	ADNR-class:		Category:	
	IMDG/GGVSee-CI/Digit:	3, II	EmS:	F-E, S-D
	MFAG:	330	ICAO/IATA:	3
			PG:	II

## 15. Regulatory Information

- Labelling  
The product is classified and labelled in accordance with EC directives/German regulations on dangerous substances.
- Hazard symbols
- F Highly flammable
- Xi Irritant
- R phrases
- 11 Highly flammable.
- 37/38 Irritating to respiratory system and skin.
- 43 May cause sensitization by skin contact.
- S phrases
- 16 Keep away from sources of ignition --- No smoking.
- 29 Do not empty into drains.
- 33 Take precautionary measures against static discharges.
- 9 Keep container in a well-ventilated place.
- Water hazard class / remarks  
Weakly water hazardous WGK 1



Highly flammable



Irritating

## 16. Other Information

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.

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