

Material Safety Data Sheet According to 91/155 EC

Trade name: **New Outline skin glaze**

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Version 2

1 Identification of substance:

- Product details:
- Trade name: New Outline skin glaze
- Article number: 16201010
- Application of the substance / the preparation: Dental sealing material
- Manufacturer / Supplier:
anax dent GmbH Olgastrasse 120A D-70180 Stuttgart
Tel. 0049 711 620092.0 Fax 0049 711 620092.29
- Further information obtainable from: Andreas Kopietz
e-mail: akopietz@anaxdent.com

2 Composition / Data on components:

Chemical characterization

- Description: Liquid based on methacryl acid ester.

Dangerous components:

CAS: 80-62-6	methyl	 Xi,  F;	50-75%
EINECS: 201-297-1	methacrylate	R 11-37/38-43	

- Additional information:
For the wording of the listed risk phrases refer to section 16.

3 Hazard description



Xi Irritant, F Highly flammable

- Information concerning to particular hazards to man and environment:
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
R 11 Highly flammable.
R 37/38 Irritating to respiratory system and skin.
R 43 May cause sensitization by skin contact.
- Classification system
The classification is according to the latest editions of the EU-lists, end extended by company and literature data.

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.
- After skin contact: Immediately wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor.
- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.

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<ul style="list-style-type: none">• After swallowing: Rinse out mouth and then drink plenty of water. Do not induce vomiting; call for medical help immediately.
<p>5 Fire fighting measures</p> <ul style="list-style-type: none">• Suitable extinguishing agents: Carbon dioxide , Fire-extinguishing powder, Foam, Water haze.• For safety reasons unsuitable extinguishing agents: Water with full jet.• Special hazards caused by the substance, its products of combustion or resulting gases: Can form explosive gas-air mixtures. Danger of polymerization.• Protective equipment: Wear self-contained respiratory protective device.• Additional information: Cool endangered receptacles with water spray. Collect contaminated fire fighting water separately. It must not enter the sewage system. Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.
<p>6 Accidental release measures</p> <ul style="list-style-type: none">• Person-related safety precautions: Ensure adequate ventilation. Keep away from ignition sources. Wear protective clothing. Avoid eye and skin contact with the substance.• Measures for environmental protection: Do not allow product to reach sewage system or any water course. Do not allow to penetrate the ground/soil.• Measures for cleaning/collecting: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Send for recovery or disposal in suitable receptacles. When pumping out, please ensure grounding.
<p>7 Handling and storage</p> <p>Handling</p> <ul style="list-style-type: none">• Information for safe handling: Ensure good ventilation/exhaustion at the workplace.• Information about fire - and explosion protection: Keep ignition sources away - Do not smoke. <p>Storage</p> <ul style="list-style-type: none">• Requirements to be met by storerooms and receptacles: Close container immediately after use and protect product from light incidence.• Information about storage in one common storage facility: Store away from foodstuffs.• Further information about storage conditions: Store in cool, dry conditions in well sealed receptacles.
<p>8 Exposure controls and personal protection gear</p> <ul style="list-style-type: none">• Additional information about design of technical facilities:

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No further data; see item 7.

Ingredients with limit values that require monitoring at the workplace:	
80-62-6 methyl methacrylate	
OES	Short-term value: 416 mg/m ³ , 100 ppm Long-term value: 208 mg/m ³ , 50 ppm

- Additional information: The lists valid during the making were used as basis.
- Personal protective equipment
- General protective and hygienic measures:
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the skin.
- Respiratory protection: Not necessary if room is well-ventilated.
Use suitable respiratory protective device when high concentrations are present.
Short term filter device: Filter AX.
- Protection of hands: Protective gloves.
- Material of gloves Butyl rubber, BR
- Penetration time of glove material: The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- Eye protection: Safety glasses
- Body protection: Protective work clothing.

9 Physical and chemical properties:

- General information
 - Form: Fluid
 - Colour: Colourless
 - Odour: Characteristic
- Change in condition
 - Melting point / Melting range: -48°C
 - Boiling point / Boiling range: 101°C
- Flash point: 10°C
- Ignition temperature: 430 °C
- Self-igniting: Product is not self-igniting.
- Danger of explosion: Product is not explosive. However, formation of explosive air / vapour mixtures are possible.
- Explosion limits:
 - Lower: 2,1 Vol.% (Literature)
 - Upper: 12,5 Vol. % (Literature)
- Vapour pressure at 20°C: 40mbar
- Density at 20°C: Not determined
- Solubility in / Miscibility with water: slightly soluble
- Viscosity: Not determined

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<ul style="list-style-type: none"> • pH-value: Not determined 																												
<p>10 Stability and reactivity</p> <ul style="list-style-type: none"> • Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications. • Materials to be avoided: In presence of radical formers (e. g. peroxides), deoxidizing substances, and/or heavy metal ions, polymerization with heat release is possible. • Dangerous reactions: - • Dangerous decomposition products: - 																												
<p>11 Toxicological information</p> <ul style="list-style-type: none"> • Acute toxicity: • LD/LC50 values relevant for classification: methyl methacrylate LD-50 oral >5000 mg/kg rat (lit.) LD-50 inhalativ 7093 ppm/4h rat (lit.) Aromatic urethane acrylate LD-50 oral 2500 mg/kg rat (Lit.) dermal 4000mg/kg rab (Lit.) • Primary irritant effect: • on the skin: Irritant to skin and mucous membranes. • on the eye: Slightly irritating. • Sensitization: Sensitization possible through skin contact. Sensitization possible through inhalation. • Additional toxicological information: The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version. Irritant • Sensitization: May cause sensitization by skin contact. 																												
<p>12 Ecological information:</p> <ul style="list-style-type: none"> • Behaviour in environmental systems: Components: methyl methacrylate Biodegradability: 30,7 % Time: 28 d Method: OECD 301 C Valuation: difficult to decompose • Ecotoxicological effects: • Acquatic toxicity: <table border="0"> <thead> <tr> <th>Type of test</th> <th>Effective concentration</th> <th>Method</th> <th>Assessment</th> </tr> </thead> <tbody> <tr> <td>Toxicity to fish:</td> <td>LC-50: >79 mg/l</td> <td>OECD 203</td> <td></td> </tr> <tr> <td>(MMA)</td> <td>NOEC: 40 mg/l</td> <td>ISO 7346</td> <td></td> </tr> <tr> <td></td> <td>Time: 96 h EEC84</td> <td></td> <td></td> </tr> <tr> <td></td> <td>Species: Oncorhynchus mykiss</td> <td></td> <td></td> </tr> <tr> <td>Toxicity to Micro-Organisms (MMA)</td> <td>ECO: 100 mg/l</td> <td></td> <td>starting inhibition of cell growth</td> </tr> <tr> <td></td> <td>Species: Pseudomonas putida</td> <td></td> <td></td> </tr> </tbody> </table> • General notes: Water hazard class 1 (German Regulation) (Self-assessment): 	Type of test	Effective concentration	Method	Assessment	Toxicity to fish:	LC-50: >79 mg/l	OECD 203		(MMA)	NOEC: 40 mg/l	ISO 7346			Time: 96 h EEC84				Species: Oncorhynchus mykiss			Toxicity to Micro-Organisms (MMA)	ECO: 100 mg/l		starting inhibition of cell growth		Species: Pseudomonas putida		
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slightly hazardous for water.
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13 Disposal considerations

- Product:
- Recommendation: Must be specially treated adhering to official regulations. Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- European waste catalogue: 08 01 11| waste paint and varnish containing organic solvents or other dangerous substances.

Uncleaned packaging

- Recommendation: Packagings that may not be cleansed are to be disposed of in the same manner as the product.

14 Transport information

- Land transport ADR/RID (cross-border)



ADR/RID class: 3 (F1) Flammable liquids.

Danger code (Kemler): 339

UN-Number: 1247

Packaging group: II

Hazard label 3

Description of goods: 1247 METHYL METHACRYLATE MONOMER, STABILIZED, mixture

- Maritime transport IMDG:



IMDG Class: 3

UN Number: 1247

Label 3

Packaging group: II

EMS Number: F-E,S-D

Marine pollutant: No

Proper shipping name: METHYL METHACRYLATE MONOMER, STABILIZED, mixture

- Air transport ICAO-TI and IATA-DGR:



ICAO/IATA Class: 3

UN/ID Number: 1247

Label 3

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Packaging group: II
Proper shipping name: METHYL METHACRYLATE MONOMER, STABILIZED, mixture

15 Regulations

- Labelling according to EU guidelines:
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials
- Code letter and hazard designation of product:
Xi Irritant
F Highly flammable
- Hazard-determining components of labelling:
methyl methacrylate
- Risk phrases:
11 Highly flammable.
37/38 Irritating to respiratory system and skin.
43 May cause sensitization by skin contact.
- Safety phrases:
9 Keep container in a well-ventilated place.
16 Keep away from sources of ignition - No smoking.
23 Do not breathe gas/fumes/vapour/ spray.
24 Avoid contact with skin.
37 Wear suitable gloves.
60 This material and its container must be disposed of as hazardous waste.
- National regulations
- Information about limitation of use:
Employment restrictions concerning pregnant and lactating women must be observed.
- Technical instructions (air):

Class	Share in %
II	50-75
- Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

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 R-phrases
11 Highly flammable.
37/38 Irritating to respiratory system and skin.
43 May cause sensitization by skin contact.
- Department issuing MSDS: anax dent GmbH
- Contact: Mr. Andreas Kopietz