

Material Safety Data Sheet According to 91/155 EC

Trade name: Acryline liquid

Printing date 10.06.2008

Version 2

1 Identification of substance:

- Product details:
- Trade name: Acryline liquid
- Article number: 1710.....
- Application of the substance / the preparation: self curing resin
- Manufacturer / Supplier:
anax dent GmbH Olgastrasse 120A D-70180 Stuttgart
Tel. 0049 711 620092.0 Fax 0049 711 620092.29
email: akopietz@anaxdent.com
- Further information obtainable from: Andreas Kopietz
- Information in case of emergency: 0049 711 6200920

2 Composition / Data on components:

Chemical characterization

- Description: Liquid based on methacryl acid ester, containing an activator.
- Dangerous components:

CAS: 80-62-6 EINECS: 201-297-1	methyl methacrylate	 Xi,  F; R 11-37/38-43	75-100%
CAS: 142-09-6 EINECS: 205-521-9	n-Hexylmethacrylat	 Xi; R 36/37/38	10-25%

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

3 Hazard identification

- 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 Highly flammable.
R 37/38 Irritating to respiratory system and skin.
R 43 May cause sensitisation by skin contact.
- Classification system
The classification is according to the latest edit ions of the EU-lists, and extended by company and literature data.

4 First aid measures

- After inhalation: Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.

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

5 Fire fighting measures

- Suitable extinguishing agents:
Water haze, Foam, Fire-extinguishing powder, Carbon dioxide
- For safety reasons unsuitable extinguishing agents: Water with full jet.
- Protective equipment: No special measures required.
- 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.

6 Accidental release measures

- Person-related safety precautions:
Ensure adequate ventilation.
Avoid eye and skin contact with the substance.
Wear protective equipment. Keep unprotected persons away.
Keep away from ignition sources.
- Measures for environmental protection:
Do not allow to penetrate the ground/soil.
Prevent seepage into sewage system, work pits and cellars.
- Measures for cleaning/collecting:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents
- Additional information:
See Section 13 for disposal information.
See Section 8 for information on personal protection equipment.
See Section 7 for information on safe handling

7 Handling and storage

Handling

- Information for safe handling:
Keep away from heat and direct sunlight.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- Information about fire - and explosion protection:
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.

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<p>Storage</p> <ul style="list-style-type: none"> • Requirements to be met by storerooms and receptacles: Store in a cool location. 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: Keep receptacle tightly sealed. 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: No further data; see item 7. • Ingredients with limit values that require monitoring at the workplace: <table border="1"> <tr> <td colspan="2">80-62-6 methyl methacrylate</td> </tr> <tr> <td>OES</td> <td>Short-term value: 416 mg/m³, 100 ppm Long-term value: 208 mg/m³, 50 ppm</td> </tr> </table> <ul style="list-style-type: none"> • 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 eyes and skin. • Respiratory protection: Not necessary if room is well-ventilated. Use suitable respiratory protective device when high concentrations are present. Filter AX. • Protection of hands: Solvent resistant 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: Tightly sealed goggles. • Body protection: Solvent resistant protective clothing (only when handling large quantities). 		80-62-6 methyl methacrylate		OES	Short-term value: 416 mg/m ³ , 100 ppm Long-term value: 208 mg/m ³ , 50 ppm						
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OES	Short-term value: 416 mg/m ³ , 100 ppm Long-term value: 208 mg/m ³ , 50 ppm										
<p>9 Physical and chemical properties:</p> <ul style="list-style-type: none"> • General information <table> <tr> <td>Form:</td> <td>Fluid</td> </tr> <tr> <td>Colour:</td> <td>Colourless</td> </tr> <tr> <td>Odour:</td> <td>Characteristic</td> </tr> </table> • Change in condition <table> <tr> <td>Melting point / Melting range:</td> <td>undetermined</td> </tr> <tr> <td>Boiling point / Boiling range:</td> <td>101°C</td> </tr> </table> • Flash point: 10°C 		Form:	Fluid	Colour:	Colourless	Odour:	Characteristic	Melting point / Melting range:	undetermined	Boiling point / Boiling range:	101°C
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<ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> Lower: 2,1 Vol % Upper: 12,5 Vol % • Vapour pressure at 20°C: 47 hPa • Density: Not determined • Solubility in / Miscibility with water: Not miscible or difficult to mix. • pH-value: Not determined • Viscosity: <ul style="list-style-type: none"> kinematic: Not determined • Solvent content: <ul style="list-style-type: none"> Organic solvents: 0,0% 						
<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: Exothermic polymerization • Dangerous decomposition products: No dangerous decomposition products known. 						
<p>11 Toxicological information</p> <ul style="list-style-type: none"> • Acute toxicity: • LD/LC50 values relevant for classification: <table border="0" style="margin-left: 20px;"> <tr> <td>methyl methacrylate</td> <td>LD-50 oral</td> <td>▶5000 mg/kg rat (lit.)</td> </tr> <tr> <td></td> <td>LD-50 inhalativ</td> <td>7093 ppm/4h rat (lit.)</td> </tr> </table> • Primary irritant effect: <ul style="list-style-type: none"> • on the skin: Irritant to skin and mucous membranes. • on the eye: Slightly irritating. • Sensitisation: Sensitisation possible through skin contact. • Additional toxicological information: <p>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.</p> <p>Irritant</p> • Sensitisation: May cause sensitisation by skin contact. 	methyl methacrylate	LD-50 oral	▶5000 mg/kg rat (lit.)		LD-50 inhalativ	7093 ppm/4h rat (lit.)
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- 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
- 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 sensitisation 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 juveniles must be observed.

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Employment restrictions concerning pregnant and lactating women must be observed.

- Technical instructions (air):

Class	Share in %
II	75-100
III	2,5-10

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.
36/37/38 Irritating to eyes, respiratory system and skin.
37/38 Irritating to respiratory system and skin.
43 May cause sensitisation by skin contact.
- Department issuing MSDS: anax dent GmbH
- Contact: Andreas Kopietz