

Material Safety Data Sheet

Trade name: **anaxBLEND model LC**





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Version 1

1 Identification of substance:

- **Product details:**
- **Trade name:** anaxBLEND model LC
- **Article number:** 20700009
- **Application of the substance / the preparation:** Lightcuring adhesive agent on methacrylate base.
- **Manufacturer / Supplier:**
anax dent GmbH Olgastrasse 120A D-70180 Stuttgart
Tel. 0049 711 620092.0 Fax 0049 711 620092.29 email: info@anaxdent.com
- **Further information obtainable from:** Mr. Andreas Kopietz

2 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 in the EU" in the latest valid version.
R 11 Highly flammable.
R 36/37/38 Irritating to the eyes, respiratory system and skin.
R 43 May cause sensitisation by skin contact.
- **Classification system:**
The classification is according to the latest editions of the EU-lists, end extended by company and literature data.
- **GHS label elements:**

Danger
H225 – Highly flammable liquid and vapour.

Warning
H315 – Causes skin irritation.
H319 – Causes serious eye irritation.
H317 – May cause an allergic skin reaction.
H335 – May cause respiratory irritation.
- **Prevention:**
P210 Keep away from heat / sparks / open flames / hot surfaces. – No smoking.
P241 Use explosion-proof electrical / ventilating / lighting / equipment.
- **Response:**
P303+P361+P353 IF ON SKIN (or on hair): Remove / take off immediately all contaminated clothing.
Rinse skin with water / shower.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- **Storage:**
P405 Store locked up.
- **Disposal:**
P501 Dispose of contents / container in accordance with local / regional / national / international regulations.

3 Composition / Data on components:

Chemical characterization

- **Description:** Lightcuring adhesive agent on a methacrylate base.
- **Dangerous components:** Aliphatic urethane acrylate 25-50% Xi; R 36-43

CAS: 80-62-6	methyl	 Xi,  F; R 11-37/38-43	50-75 %
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EINECS: 201-297-1	methacrylate	Danger: 2.6/2	
		Warning: 3.2/2, 3.4.S/1, 3.8/3	

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

4 First aid measures

- **After inhalation:** Supply fresh air and to be sure call for a doctor.
- **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.
- **After swallowing:** Rinse out mouth and then drink plenty of water. Do not induce vomiting; call for medical help immediately.

5 Fire fighting measures

- **Suitable extinguishing agents:** Carbon dioxide, Fire-Extinguishing powder, foam, water haze.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet.
- **Protective equipment:** Wear self-contained respiratory protective device. Wear fully protective suit.
- **Additional information:** Collect contaminated fire fighting water separately. It must not enter the sewage system.

6 Accidental release measures

- **Person-related safety precautions:** Keep away from ignition sources. Wear protective clothing. Avoid eye and skin contact with the substance.
- **Measures for environmental protection:** Do not allow to enter sewers / surface or ground water.
- **Measures for cleaning / collecting:** Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Send for recovery or disposal in suitable receptacles.

7 Handling and storage

Handling

- **Information for safe handling:** Ensure good ventilation / exhaustion at the workplace.
- **Information about fire- and explosion protection:** Keep ignition sources away – Do not smoke. Protect against electrostatic charges.

Storage

- **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:** Store in cool, dry conditions in well sealed receptacles.

8 Exposure controls and personal protection gear

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Ingredients with limit values that require monitoring at the workplace:**

80-62-6 methyl methacrylate	
OEL	short-term value: 510 mg/m ³ , 125 ml/m ³ long-term value: 410 mg/m ³ , 100 ml/m ³

- **Additional information:** The lists valid during the making were used as basis.

Personal protective equipment

- **General protective and hygienic measures:** Immediately remove all soiled and contaminated clothing.
- **Respiratory protection:** Not necessary if room is well-ventilated.
- **Protection of hands:** Protective gloves.
- **Material of gloves:** Butyl rubber, BR.
- **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.




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<ul style="list-style-type: none">• Eye protection: Safety glasses.• Body protection: Protective work clothing (only when handling large quantities).																													
9 Physical and chemical properties: <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>ester-like</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>100°C</td></tr></table>• Flash point: 10°C• Ignition temperature: 430°C• Danger of explosion: Product is not explosive. However, formation of explosive air/vapour mixtures are possible.• Explosion limits:<table><tr><td>Lower:</td><td>2.1 Vol%</td></tr><tr><td>Upper:</td><td>12.5 Vol%</td></tr></table>• Vapour pressure: 40 mbar• Density at 20°C: 1 g/cm³• Solubility in / Miscibility with water at 20°C: 8,0 g/l	Form:	fluid	Colour:	colourless	Odour:	ester-like	Melting point / Melting range:	undetermined	Boiling point / Boiling range:	100°C	Lower:	2.1 Vol%	Upper:	12.5 Vol%															
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10 Stability and reactivity <ul style="list-style-type: none">• 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 decomposition products: Carbon monoxide and carbon dioxide.																													
11 Toxicological information <ul style="list-style-type: none">• Acute toxicity:• LD/LC50 values relevant for classification:<table><tr><td>methyl methacrylate</td><td>LD-50 oral</td><td>>5000mg / kg rat (Lit.)</td></tr><tr><td></td><td>LD-50 inhalativ</td><td>7093 ppm / 4g 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: Irritating effect.• Sensitization: Sensitization possible through skin contact.• 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.	methyl methacrylate	LD-50 oral	>5000mg / kg rat (Lit.)		LD-50 inhalativ	7093 ppm / 4g rat (Lit.)																							
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12 Ecological information: <ul style="list-style-type: none">• Behaviour in environmental systems:• Components:<table><tr><td>methyl methacrylate</td><td>Biodegradability:</td><td>30,7%</td></tr><tr><td></td><td>Time:</td><td>28 d</td></tr><tr><td></td><td>Method:</td><td>OECD 301 C</td></tr><tr><td></td><td>Valuation:</td><td>difficult to decompose</td></tr></table>• Ecotoxicological effects:• Aquatic toxicity:<table><thead><tr><th>Type of test</th><th>Effective concentration</th><th>Method</th><th>Assessment</th></tr></thead><tbody><tr><td rowspan="4">Toxicity to fish: (MMA)</td><td>LC-50: >79mg/l</td><td>OECD 203</td><td></td></tr><tr><td>NOEC: 40mg/l</td><td>ISO 7346</td><td></td></tr><tr><td>Time: 96 h</td><td>EEC84</td><td></td></tr><tr><td>Species: Oncorhynchus mykiss</td><td></td><td></td></tr></tbody></table>	methyl methacrylate	Biodegradability:	30,7%		Time:	28 d		Method:	OECD 301 C		Valuation:	difficult to decompose	Type of test	Effective concentration	Method	Assessment	Toxicity to fish: (MMA)	LC-50: >79mg/l	OECD 203		NOEC: 40mg/l	ISO 7346		Time: 96 h	EEC84		Species: Oncorhynchus mykiss		
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<p>Toxicity to Micro-organisms (MMA) ECO: 100mg/l starting inhibition of cell growth Species: Pseudomonas putida</p> <ul style="list-style-type: none">• General notes: Water hazard class I (German Regulation)(Self-assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
<p>13 Disposal considerations</p> <p>Product:</p> <ul style="list-style-type: none">• Recommendation: Must be specially treated adhering to official regulations. <p>European waste catalogue: 07 01 04 other organic solvents, washing liquids and mother liquors.</p> <p>Uncleaned packaging:</p> <ul style="list-style-type: none">• Recommendation: Disposal must be made according to official regulations.
<p>14 Transport information</p> <ul style="list-style-type: none">• Land transport ADR/RID (cross-border): <div style="text-align: center;"></div> <p>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<ul style="list-style-type: none">• Maritime transport IMDG:<div style="text-align: center;"></div><p>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<ul style="list-style-type: none">• Air transport ICAO-TI and IATA-DGR:<div style="text-align: center;"></div><p>ICAO/IATA Class: 3 UN/ID Number: 1247 Label: 3 Packaging group: II Proper shipping name: METHYL METHACRYLATE MONOMER, STABILIZED, mixture<ul style="list-style-type: none">• UN "Model Regulation": UN1247, METHYL METHACRYLATE MONOMER, STABILIZED, mixture, 3, II</p></p></p>
<p>15 Regulations</p> <ul style="list-style-type: none">• 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

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- **Hazard-determining components of labelling:** methyl methacrylate, aliphatic urethane acrylate.
- **Risk-phrases:**
 - 11 Highly flammable.
 - 36/37/38 Irritating to eyes, 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.
 - 37/39 Wear suitable gloves and eye/face protection.
 - 60 This material and its container must be disposed of as hazardous waste.
- **National regulations:**
- **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.
 - 36/37/38 Irritating to eyes, respiratory system and skin.
 - 43 May cause sensitisation by skin contact.
- **Department issuing MSDS:** anax dent GmbH
- **Contact:** Mr. Andreas Kopietz
- **Abbreviations and acronyms:**
 - ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 - RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
 - IMDG: International Maritime Code for Dangerous Goods
 - IATA: International Air Transport Association
 - IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
 - ICAO: International Civil Aviation Organization
 - ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
 - GHS: Globally Harmonized System of Classification and Labelling of Chemicals
 - LC50: Lethal concentration, 50 percent
 - LD50: Lethal dose, 50 percent
- *** Data compared to the previous version altered.**