

msds MICROSTAR®

New Outline Skin Bonding Fluid

1 Identification of Substance:

Material Safety Data Sheet

Date: 10-17-2007

Identification of Substance and Product Details

Trade Name: **New Outline Skin Bonding**

Supplier:

MICROSTAR® Dental LLC

1000 Lakes Pkwy.

Lawrenceville, GA 30043

www.microstardental.com

Emergency Information:

During Normal Business Hours, 1-800-313-6427 or 1-770-339-5757

2 Composition/Data on Components:

Chemical characterization

Description:

Liquid based on methacryl acid ester, containing an activator, used for the repair of crowns and bridges in dental medium.

Dangerous components:

CAS: 80-62-6

EINECS: 201-297-1

methyl methacrylate Xi; R 37/38-43 50-75%

3 Hazard Identification:

Hazard description:

Xi Irritant

F Highly flammable

Information concerning to particular hazards to man and environment

The product has to be labeled 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 sensitizations by skin contact.

Classification system

The classification is according to the latest editions of the EU-lists, and 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.

After swallowing Call a doctor immediately.

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5 Fire Fighting Measures:

Suitable extinguishing agents

- Fire-extinguishing powder
- Foam
- Carbon dioxide
- Water spray

For safety reasons unsuitable extinguishing agents Water with full jet.

Protective equipment:

- Wear self-contained respiratory protective device.
- Wear fully protective suit.

6 Accidental Release Measures:

Personal safety precautions:

- Ensure adequate ventilation
- Wear protective clothing.
- Keep away from ignition sources

Measures for environmental protection: Do not allow to enter sewers/ surface or ground water.

Measures for cleaning/collecting:

- Pick up mechanically.
- When pumping out, please ensure grounding.
- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- Dispose of the material collected according to regulations.

7 Handling and Storage:

Handling

Information for safe handling:

- Keep receptacles tightly sealed.
- 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.
- Do not store at temperatures over 30 °C.
- Only fill the container up to 90 %.
- Close container immediately after use and protect product from light incidence.

Information about storage in one common storage facility: Not required.

Further information about storage conditions:

- Keep receptacle tightly sealed.
- Store in cool, dry conditions in well sealed receptacles.

Storage class

Class according to regulation on flammable liquids: A I

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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

OES Short-term value: 416 mg/m³, 100 ppm

Long-term value: 208 mg/m³, 50 ppm

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
- Wash hands before breaks and at the end of work.
- Avoid contact with the eyes and skin.
- Do not inhale gases / fumes / aerosols.

Respiratory protection:

- Use suitable respiratory protective device when high concentrations are present.
- Short term filter device:
 - o Filter AX.

Protection of hands: Protective gloves.

Material of gloves Rubber gloves

Penetration time of glove material -

Eye protection: Tightly sealed goggles

9 Physical and Chemical Properties:

General Information

Form

Color

Odor

Fluid

Clear

Ester-Like

Change in condition

Melting point/Melting range:

Boiling point/Boiling range:

-48°C

ca. 100°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/vapor mixtures are possible.

Explosion limits:

Lower:

Upper:

2.1 Vol %

12.5 Vol %

Density: Not determined

Solubility in / Miscibility with

Water: Not determined

Viscosity:

dynamic:

kinematic:

Not determined

Not determined

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10 Stability and Reactivity:

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: No dangerous reactions known

Dangerous decomposition products: No dangerous decomposition products known

11 Toxicological Information:

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.)

Primary irritant effect:

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

12 Ecological Information:

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:

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- ECO: 100 mg/l starting inhibition

Organisms Species: of cell growth

(MMA) Pseudomonas putida

General notes:

- Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.
- Do not allow product to reach ground water, water course or sewage system.

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13 Disposal Considerations:

Product:

Recommendation: Must be specially treated adhering to official regulations.

European waste catalogue

08 01 11 waste paint and varnish containing organic solvents or other dangerous substances

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

14 Transport Information:

Land transport ADR/RID (cross-border)

ADR/RID class:

Item:

Danger code (Kemler):

UN-Number:

Hazard label

Description of goods:

3 Flammable liquids

3b

33

1247

3

1247 Methyl methacrylate monomer, inhibited, mixture

Maritime transport IMDG:

IMDG Class:

Page:

UN Number:

Packaging group:

EMS Number:

MFAG:

Marine pollutant:

Proper shipping name:

3.2

3259

1247

II

3-07

330

No

Methyl methacrylate monomer, inhibited, mixture

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class:

UN/ID Number:

Packaging group:

Proper shipping name:

3

1247

II

Methyl methacrylate monomer, inhibited, mixture

15 Regulations:

Labeling 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 labeling:

methyl methacrylate

Risk phrases:

11 Highly flammable.

37/38 Irritating to respiratory system and skin.

43 May cause sensitization by skin contact.

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Safety phrases:

9 Keep container in a well-ventilated place.

16 Keep away from sources of ignition - No smoking.

24 Avoid contact with skin.

33 Take precautionary measures against static discharges.

37 Wear suitable gloves.

60 This material and its container must be disposed of as hazardous waste.

National regulations

Classification according to VbF: A I

Technical instructions (air):

Class Share in %

II 50-75

Water hazard class: Water hazard class 2 (Self-assessment): 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

37/38 Irritating to respiratory system and skin.

43 May cause sensitization by skin contact.