

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

Version: 1 Revision date: 02.01.2019

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Audio mould

Additive Resin

1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: Laser-curing resin for the production of objects based on a

stereolithography process with 385 nm / 405 nm lightsource.

Uses advised against:

1.3. Details of the supplier of the safety data sheet

Manufacturer

MACK4D

Am Kraftwerk Lippendorf 16 Telephone: +49 (0) 34342 540640

D 04575 Neukiritzsch

Supplier (manufacturer/importer/only representative/downstream user/distributor)

MACK4D

Am Kraftwerk Lippendorf 16 Telephone: +49 (0) 34342 540640

D 04575 Neukiritzsch

Information contact

+49 (0) 34342 540640 Information telephone: +49 (0) 34342 540640

E-mail (competent person): info@mack4d.de

Website: www.mack4d.de

National contact

MACK4D GmbH Information telephone: +49 (0) 160 7081711

E-mail (competent person): info@mack4d.de

Website: www.mack4d.de

Dept. responsible for information:

Abteilung F&E

1.4. Emergency telephone number

MACK4D **Telephone:** +49 (0) 160 7081711

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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008:

Skin Irrit. 2; H315, Eye Irrit. 2; H319, Skin Sens. 1; H317, STOT SE 3; H335

Directive 67/548/EEC:

Xi; R36, Xi; R38, Xi; R37, -; R43

2.2. Label elements

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms:

GHS07

Signal word: Warning

Hazard statements: 315 Causes skin irritation.

317 May cause an allergic skin reaction.
319 Causes serious eye irritation.
335 May cause respiratory irritation.

Precautionary statements: 264.1 Wash hands thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face

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protection.

302+352 IF ON SKIN: Wash with plenty of water/.?.

321 Specific treatment (see .? on this label).

332+313 If skin irritation occurs: Get medical advice/attention.
362+364 Take off contaminated clothing and wash it before reuse.

Classification according to Directive 67/548/EEC or 1999/45/EC

Hazard symbols:

Xi Irritant.

R-phrases: 36 Irritating to eyes.

37 Irritating to respiratory system.

38 Irritating to skin.

43 May cause sensitization by skin contact.

S-phrases: 20/21 When using do not eat, drink or smoke.

28.2 After contact with skin, wash immediately with plenty of water and soap.

Classification according to NFPA Hazard Identification System

Hazard symbol:

1111

Health hazard: 1
Flammability: 1
Reactivity: 1
Special precautions:

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Classification according to HMIS (Hazardous Materials Identification System)

Hazard symbol:

HEALTH 1
FLAMMABILITY 1
PHYSICAL HAZARD 1
B

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Health hazard: 1
Flammability: 1
Physical hazards: 1
Personal protective equipment: B

2.3. Other hazards

SECTION 3: Composition / information on ingredients

3.1. Substances

3.2. Mixtures

Composition/information on ingredients

Bisphenol A-ethoxylat (2	41637-38-1		Skin Irrit. 2; H315	Xi; R36/37/38
EO/Phenol) Dimethacrylat			Skin Sens. 1; H317	-; R43
,			Eye Irrit. 2; H319	
			STOT SE 3; H335	

Substance with a common (EC) occupational exposure limit value

Bisphenol A-ethoxylat (2	41637-38-1		Skin Irrit. 2; H315	Xi; R36/37/38
EO/Phenol) Dimethacrylat			Skin Sens. 1; H317	-; R43
,			Eye Irrit. 2; H319	
			STOT SE 3; H335	

(Full text of R-, H- and EUH-phrases: see section 16.)

Additional information

SECTION 4: First aid measures

4.1. Description of first aid measures

General information: Remove contaminated, saturated clothing immediately. When in doubt or if

symptoms are observed, get medical advice. If unconscious place in recovery

position and seek medical advice.

Following inhalation: Provide fresh air.

Following skin contact: Wash immediately with: Water and soap

After eye contact: In case of contact with eyes flush immediately with plenty of flowing water for

10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

After ingestion: Never give anything by mouth to an unconscious person or a person with

cramps. Call a physician immeditaly.

Self-protection of the first aider:

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4.2. Most important symptoms and effects, both acute and delayed

Symptoms:

Nature of Hazard:

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor:

Special treatment:

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Dry extinguishing powder Dry sand

Unsuitable extinguishing media: Excess water

5.2. Special hazards arising from the substance or mixture

In case of fire: Wear self-contained breathing apparatus. Co-ordinate fire-fightin measures to the fire surroundings.

5.3. Advice for firefighters

General information

Do not inhale explosion and combustion gases. Co-ordinate fire-fighting measures to the fire surroundings.

Special protective equipment for firefighters:

In case of fire: Wear self-contained breathing apparatus. Do not inhale explosion and combustion gases. Co-ordinate fire-fighting measures to the fire surroundings.

Additional information

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protection equipment. Remove all sources of ignition. Provide adequate ventilation.

6.2. Environmental precautions

Do not allow to enter into water or drains.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

6.4. Reference to other sections

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advices on safe handling

All work processes must always be designed so that the following is excluded: Inhalation

Technical measures

All work processes must always be designed so that the following is excluded: Inhalation US - 01.03.18

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Precautions against fire and explosion

Always close containers tightly after the removal of product. Use only in well-ventilated areas.

Additional information

7.2. Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Only use the material in places where open light, fire and other flammable sources can be kept away. Use only in well-ventilated areas.

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Packaging materials

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place.

Hints on joint storage

Keep only in the original container in a cool, well-ventilated place. Keep in a cool, well-ventilated place.

Storage class: 10 Combustible liquids unless LGK 3A or 3B.

Further information on storage conditions

7.3. Specific end use(s)

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

occupational exposure limit value

Bisphenol A-ethoxylat (2	41637-38-1					
EO/Phenol) Dimethacrylat						

Substance with a common (EC) occupational exposure limit value

Bisphenol A-ethoxylat (2	41637-38-1		
EO/Phenol) Dimethacrylat			

DNEL-/PNEC-values DNEL value

Bisphenol A-ethoxylat (2 EO/Phenol) Dimethacrylat	41637-38-1		
,			

PNEC Value

1.120 18.30					
Bisphenol A-ethoxylat (2 EO/Phenol) Dimethacrylat	41637-38-1				

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Risk management measures according to used control banding approach

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Additional information

8.2. Exposure controls

Occupational exposure controls

General protection and hygiene measures

Personal protection equipment

Respiratory protection

Respiratory protection

Hand protection

NBR (Nitrile rubber)

Eye/face protection

Eye glasses with side protection

Body protection

lab coat

Environmental exposure controls

Consumer exposure controls

Exposure Scenario

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state: liquid various Odour: spezific

Odour threshold:

Safety relevant basis data

carety referant basic aata	parameter		unit		remark
Density:	•	1,1	g/cm3		
Bulk density:				n.a.	
pH:				n.a.	
Melting point/freezing point:				n.a.	
Initial boiling point and boiling				n.a.	
range:					
Flash point:		>150	оС		
Flammability (solid, gas):				n.a.	
Explosivity:				n.a.	

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Lower explosion limit: n.a. **Upper explosion limit:** n.a. Ignition temperature: n.a. **Decomposition temperature:** n.a. Oxidizing potential: n.a. Vapour pressure: n.a. Vapour density: n.a. **Evaporation rate:** n.a. Water solubility: nein Fat solubility: Soluble in:

Partition coefficient: nn.a.

octanol/water:

Viscosity: ca.700- Pas

1200

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Solvent separation test: n.a. Solvent content: n.a.

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

n.a.

10.2. Chemical stability

10.3. Possibility of hazardous reactions

n.a.

10.4. Conditions to avoid

Reaction with light, risk of polymerisation

10.5. Incompatible materials

Reaction with peroxides and rad. Compounds

10.6. Hazardous decomposition products

unstable products can polymerise spontan

Additional information

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Bisphenol A-ethoxylat (2	41637-38-1	
EO/Phenol) Dimethacrylat		

Specific symptoms in laboratory animals

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Irritation and etching

Irritant effect on the skin

Irritant effect on the eye

Irritant effect on the respiratory tract

Additional information

Sensitization

Repeated dose toxicity (subacute, subchronic, chronic)

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Carcinogenicity

Germ cell mutagenicity

Reproductive toxicity

General remarks

Practical experience/human evidence

Other observations

Other information

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity

= otto xion;						
Bisphenol A-ethoxylat (2	41637-38-1					
FO/Phenol) Dimethacrylat						

12.2. Persistence and degradability

12.3. Bioaccumulative potential

12.4. Mobility in soil

12.5. Results of PBT and vPvB assessment

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12.6. Other adverse effects

Further ecological information

Further details

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate disposal/Product

Dispose of waste according to applicable legislation.

Appropriate disposal / Package

Appropriate disposal / Package

List of proposed waste codes/waste designations in accordance with EWC

Waste code product:

Waste code packaging:

remark

SECTION 14: Transport information

14.1. UN number

UN No.:

14.2. UN proper shipping name

Official directive for the transport

Proper Shipping name

14.3. Transport hazard class(es)

Hazard label(s):

Classification code:

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14.4. Packing group

Packing group:

14.5. Environmental hazards

Environmental hazards:

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14.6. Special precautions for user

Land transport (ADR/RID)

Remark:

Transport category: Tunnel restriction code: Special provisions: Limited quantity (LQ):

Sea transport (IMDG) Special Provisions:

Remark:

EmS-No: MFAG: Marine pollutant: Special provisions: Limited quantity (LQ):

UN proper shipping name

Remark:

Limited quantity (LQ):

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Remark:

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SECTION 15: Regulatory information

Labeling

Hazardous component(s) for labelling

Special labelling of particular preparations

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU legislation

Information according to 1999/13/EC about limitation of emissions of volatile organic compounds (VOC-guideline).

Regulation (EC) No 2037/2000 concerning materials, which cause damage to the ozone layer.

Regulation (EC) No. 648/2004 (Detergents regulation)

National regulations

Observe in addition any national regulations!

Restrictions of occupation

Storage class

10 Combustible liquids unless LGK 3A or 3B.

Water hazard class (WGK)

1 weak water pollutant (WGK 1)

Other regulations, restrictions and prohibition regulations

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15.2. Chemical Safety Assessment

For this preparation a chemical safety assessment has been carried out:

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SECTION 16: Other information

Relevant R-, H- and EUH-phrases (Number and full text) Hazard statements

- 315 Causes skin irritation.
- 317 May cause an allergic skin reaction.
- 319 Causes serious eye irritation.
- 335 May cause respiratory irritation.

R-phrases

- 36 Irritating to eyes.
- 37 Irritating to respiratory system.
- 38 Irritating to skin.
- 43 May cause sensitization by skin contact.

Training advice

Recommended restrictions of use

Further remarks

Documentation of changes

Key literature references and sources for data

Abbreviations and acronyms

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