

## Safety data sheet according to Regulation (EC) No. 1907/2006 (REACH), Article 31

Version number: 1.4 / Revision date: 15.06.2022

### Adjustment adhesive / liquid metal, resin

#### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

##### 1.1. Product identifier

Trade name: Adjustment adhesive / liquid metal, resin  
Article number: #62400233  
UFI code: EACR-RTKG-ES5A-U1HA

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

###### 1.2.1 Relevant uses Adhesive

###### 1.2.2 Uses advised against None known

##### 1.3. Details of the supplier of the safety data sheet

Company name: Baumann Dental GmbH  
Street/P.O. Box: Im Hölderle 5  
Post code, Place: D-75196 Remchingen  
Internet: www.baumann-dental.de  
@-mail: info@baumann-dental.de  
Telephone: +49 (0) 7232 - 73218 - 0  
Telefax: +49 (0) 7232 - 73218 - 99  
Department responsible for information: telephone: +49 (0) 7232-73218-0 / @-mail: info@baumann-dental.de

##### 1.4. Emergency telephone number

Germany: +49(0)551-19240 (Poison Information Centre North, 24h in German and English)  
Austria: +43(0)1-4064343 (Poison Information Centre, 24h)

#### SECTION 2: HAZARDS IDENTIFICATION

##### 2.1. Classification of the substance or mixture [REGULATION (EC) No. 1272/2008]

Skin Irrit. 2: H315 Causes skin irritation.  
Eye Irrit. 2: H319 Causes serious eye irritation.  
Skin Sens. 1: H317 May cause an allergic skin reaction.  
Aquatic Chronic 3: H412 Harmful to aquatic life with long lasting effects.

##### 2.2. Label elements

Labelling (CLP)



Signal word: ATTENTION

##### Contains:

2,2'-[(1-Methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane  
Reaction product: Bisphenol-F-epichlorohydrin resins with an average molecular weight  $\leq 700$

##### Hazard statements:

H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H317 May cause an allergic skin reaction.  
H412 Harmful to aquatic life with long lasting effects.

##### Precautionary statements:

P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P302+P352 IF ON SKIN: Wash with plenty of water/soap.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.  
P337 + P313 If eye irritation persists: Get medical advice/attention.  
P501 Dispose of contents/container to an approved waste disposal company or local collection point.

##### Special labelling:

EUH205 Contains epoxy constituents. May produce an allergic reaction.

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#### 2.3. Additional hazards

Health hazards:

Persons who react allergically to epoxides should avoid handling the product.

Other hazards:

No other hazards have been identified based on current knowledge.

### SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

This product is a mixture.

Content [%]	Component
30-50	2,2'-[(1-Methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane
	CAS: 1675-54-3, EINECS/ELINCS: 216-823-5, EU-INDEX: 603-073-00-2
	GHS/CLP: Eye Irrit. 2: H319 - Skin Irrit. 2: H315 - Skin Sens. 1: H317
10-30	Barium sulphate
	CAS: 7727-43-7, EINECS/ELINCS: 231-784-4
10-30	Limestone
	CAS: 1317-65-3, EINECS/ELINCS: 215-279-6
5-10	Reaction product: Bisphenol-F-epichlorohydrin resins with an average molecular weight $\leq 700$
	CAS: 9003-36-5, EINECS/ELINCS: 500-006-8
	GHS/CLP: Skin Sens. 1: H317 - Skin Irrit. 2: H315 - Eye Irrit. 2: H319 - Aquatic Chronic 2: H411
1-5	1-5 Talc (Mg <sub>3</sub> H <sub>2</sub> (SiO <sub>3</sub> ) <sub>4</sub> )
	CAS: 14807-96-6, EINECS/ELINCS: 238-877-9

Comments on components:

SVHC list (candidate list of Substances of Very High Concern for authorisation):

Contains none or less than 0.1% of the listed substances.

Wording of the listed H statements is given in SECTION 16.

### SECTION 4: FIRST AID MEASURES

#### 4.1. Description of first aid measures

General notes::

Change dusty clothing.

If inhaled:

Provide for fresh air.

If symptoms develop, get medical treatment.

In case of skin contact:

Wash with plenty of water and soap immediately after contact with the skin.

If skin irritation persists, consult a doctor.

Following eye contact

Immediately rinse eyes thoroughly with plenty of water and consult a doctor.

If swallowed:

Consult a doctor immediately.

Rinse mouth and drink lots of water.

Do not induce vomiting.

#### 4.2 Most important acute or delayed symptoms and effects

No information available.

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

Treat symptomatically.

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#### SECTION 5: FIREFIGHTING MEASURES

##### 5.1 Extinguishing media

Suitable extinguishing media: Foam, dry powder, water spray, carbon dioxide.  
Unsuitable extinguishing media: Full water jet.

##### 5.2 Special hazards arising from the substance or mixture

Danger of forming toxic pyrolysis products.  
Carbon monoxide (CO)  
Carbon dioxide (CO<sub>2</sub>)  
Chlorine compounds

##### 5.3 Advice for firefighters

Do not inhale explosion and fire gases.  
Use self-contained breathing apparatus.  
Fire residues and contaminated extinguishing water must be disposed of in accordance with local official regulations.

#### SECTION 6: ACCIDENTAL RELEASE MEASURES

##### 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

##### 6.2 Environmental precautions

Prevent spreading over a wider area (e.g. by damming or oil barriers).  
Do not allow to enter the sewage system/surface water/groundwater.

##### 6.3. Methods and material for containment and cleaning up

Allow spilled product to solidify if safely possible.  
Collect mechanically.  
Absorb with liquid-binding material (e.g. sand, sawdust, universal binders, diatomite).  
Dispose of the collected material according to regulations.

##### 6.4 Reference to other sections

See SECTIONS 8+13

#### SECTION 7: HANDLING AND STORAGE

##### 7.1 Precautions for safe handling

Only use in well-ventilated areas.  
Avoid spilling or spraying in enclosed rooms.

Take off contaminated clothing and wash before reuse.  
Do not eat, drink or smoke when using this product.  
Wash hands prior to breaks and at the end of work.  
Preventive skin protection by applying skin protection ointment.  
Contaminated work clothing must remain at the workplace.

##### 7.2 Conditions for safe storage, including any incompatibilities

Only store in the original container.  
Do not store together with oxidants.  
Keep containers tightly closed.  
Keep dry.  
Protect against warming/overheating.  
Recommended storage temperature: 5°C - 30°C  
Protect from direct sunlight.

##### Storage class (TRGS 510) LGK 10:

Flammable liquids

##### 7.3 Specific end uses

See product use, SECTION 1.2

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#### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

##### 8.1 Control parameters

Occupational exposure limits (DE)

Component
Talc (Mg <sub>3</sub> H <sub>2</sub> (SiO <sub>3</sub> ) <sub>4</sub> )
CAS: 14807-96-6, EINECS/ELINCS: 238-877-9
Occupational exposure limit: General dust limit (see also number 2.4); respirable fraction: 1.25 A (mg/m <sup>3</sup> ); inhalable fraction: 10 E (mg/m <sup>3</sup> ); AGS, DFG
Peak limit exceedance factor: 2(II)

##### 8.2 Exposure controls

Additional information on the design of technical systems: Ensure sufficient ventilation at the workplace. Measurement methods for performing workplace measurements must meet the performance requirements of DIN EN 482. Recommendations are given, for example, in the IFA list of hazardous substances.

Eye protection: Tightly sealing safety goggles. (EN 166:2001)

Hand protection: The information provided is a recommendation. For more information, please contact the glove supplier. 0.2 mm; nitrile rubber, >120 min (EN 374-1/-2/-3).

Body protection: Impermeable protective clothing.

Other protective measures: The type of personal protective equipment must be selected specifically for the workplace, depending on the concentration and quantity of the hazardous substance.

The chemical resistance of the protective items must be clarified with their suppliers.

Avoid contact with eyes and skin.

Do not inhale gases/vapours/aerosols.

Respiratory protection: Wear respiratory protection if aerosols or mists form.

Short-term filter unit, filter A (DIN EN 14387)

Thermal hazards:

Not applicable

Environmental exposure controls and monitoring:

Comply with applicable environmental guidelines that limit discharge to air, water and soil.

#### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

##### 9.1. Information on basic physical and chemical properties

Aggregate state:	Paste
Colour:	Black
Odour:	Characteristic
Odour threshold:	No information available
pH value:	Not applicable
pH value [1%]:	Not applicable
Initial boiling point and boiling range [°C]:	No information available
Flash point [°C]:	>93
Flammability (solid, gaseous) [°C]:	No information available
Lower flammability or explosion threshold:	Not applicable
Upper flammability or explosion threshold:	Not applicable
Oxidising properties:	No
Vapour pressure [kPa]:	No information available
Relative density:	[g/ml] 1.74 (20°C / 68.0°F)
Bulk density [kg/m <sup>3</sup> ]:	Not applicable
Solubility in water:	Practically insoluble
Solubility in other solvents:	No information available
Distribution coefficient [n-octanol/water]:	No information available
Kinematic viscosity:	No information available
Relative vapour density:	No information available
Evaporation rate:	No information available
Melting point/freezing point [°C]:	No information available
Ignition temperature:	No information available
Decomposition temperature [°C]:	No information available
Particle properties:	No information available
Viscosity, dynamic:	Thixotropic

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**9.2 Other information**

No information available.

**SECTION 10: STABILITY AND REACTIVITY**

**10.1 Reactivity**

None known if used as intended.

**10.2 Chemical stability**

Stable under normal ambient conditions (room temperature).

**10.3 Possibility of hazardous reactions**

Reactions with alkalis, amines and strong acids.

Reactions with strong oxidants.

**10.4 Conditions to avoid**

Intense heating.

**10.5 Incompatible materials**

See SECTION 10.3.

**10.6 Hazardous decomposition products**

No hazardous decomposition products known.

**SECTION 11: TOXICOLOGICAL INFORMATION**

**11.1 Information on toxicological effects**

Acute oral toxicity: Not determined

Component
2,2'-[(1-Methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane, CAS: 1675-54-3
LD50, oral, rat, > 4000 mg/kg (Lit.),
LD50, oral, mouse, 15,600 mg/kg (Lit.),
Barium sulphate, CAS: 7727-43-7
LD50, oral, rat, > 2000 mg/kg (Lit.),
Reaction product: Bisphenol-F-epichlorohydrin resins with an average molecular weight $\leq$ 700, CAS: 9003365
LD50, oral, rat, > 2000 mg/kg (Lit.),

Acute dermal toxicity: Not determined

Component
2,2'-[(1-Methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane, CAS: 1675-54-3
LD50, dermal, rabbit, 20,000 mg/kg (Lit.),

Acute inhalative toxicity:

Not determined

Severe eye damage/irritation:

Toxicology data is not available for the overall product.

Irritant

Calculation method

Corrosive/irritant effect on the skin:

Toxicology data is not available for the overall product.

Irritant

Calculation method

Sensitisation of the airways/skin:

Toxicology data is not available for the overall product.

May cause an allergic skin reaction.

Calculation method

Specific target organ toxicity for single exposure:

Based on the available information, the classification criteria are not met.

Specific target organ toxicity for repeated exposure:

Based on the available information, the classification criteria are not met.

Mutagenicity:

Based on the available information, the classification criteria are not met.

Reproduction toxicity:

Based on the available information, the classification criteria are not met.

Carcinogenicity:

Based on the available information, the classification criteria are not met.

Aspiration hazard:

Based on the available information, the classification criteria are not met.

General comments:

Toxicology data are not available for the overall product.

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**SECTION 12: ECOLOGICAL INFORMATION**

**12.1. Toxicity**

Component
2,2'-[(1-Methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane, CAS: 1675-54-3
LC50, (96 h), Pimephales promelas, 3.1 mg/L (OECD 203),
EC50, (48 h), Daphnia magna, 1.3 mg/L (OECD 202),
Barium sulphate, CAS: 7727-43-7
EC50, (48 h), Daphnia magna, 32 mg/L (Lit.),
Reaction product: Bisphenol-F-epichlorohydrin resins with an average molecular weight $\leq 700$ , CAS: 9003365
LC50, (96 h), Leuciscus idus, 5.7 mg/L (Lit.),
EC50, (48 h), Daphnia magna, 3.5 mg/L (Lit.),

**12.2. Persistence and degradability**

Behaviour in environmental compartments: Not determined  
 Behaviour in sewage plants: Not determined  
 Biodegradability: Not biodegradable

**12.3 Bioaccumulative potential**

No information available.

**12.4 Mobility in soil**

No information available.

**12.5 Results of PBT and vPvB assessment**

Not applicable

**12.6 Harmful endocrine properties**

No information available.

**12.7 Other adverse effects**

The product is insoluble in water.  
 The product contains organically bound halogen according to the formulation.  
 Environmental data are not available for the overall product.

**SECTION 13: DISPOSAL CONSIDERATIONS**

**13.1 Waste treatment methods**

Product residues must be disposed of in compliance with Waste Directive 2008/98/EC and national and regional regulations. No waste code number according to the European Waste Catalogue (AVV) can be defined for this product, as only the intended use by the consumer allows a classification. In the EU, the waste code number is determined in consultation with the disposal company.

Product:	Dispose of as hazardous waste. Send to an incineration plant for disposal according to local regulations.
AVV No. (recommended):	080409* Adhesives and sealants waste containing organic solvents or other hazardous substances.
Uncleaned packaging:	Untamminated packaging can be recycled. Packaging that cannot be cleaned must be disposed of in the same way as the substance itself.
AVV No. (recommended):	150110* Packaging containing residues of hazardous substances or contaminated by hazardous substances.

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#### SECTION 14: TRANSPORT INFORMATION

##### 14.1 UN number

Surface transport according to ADR/RID:	Not applicable
Inland waterway transport (ADN):	Not applicable
Transport by sea according to IMDG:	Not applicable
Air transport according to IATA:	Not applicable

##### 14.2 UN proper shipping name

Surface transport according to ADR/RID:	NOT CLASSIFIED AS DANGEROUS GOODS
Inland waterway transport (ADN):	NOT CLASSIFIED AS DANGEROUS GOODS
Transport by sea according to IMDG:	NOT CLASSIFIED AS DANGEROUS GOODS
Air transport according to IATA:	NOT CLASSIFIED AS DANGEROUS GOODS

##### 14.3 Transport hazard classes

Surface transport according to ADR/RID:	Not applicable
Inland waterway transport (ADN):	Not applicable
Transport by sea according to IMDG:	Not applicable
Air transport according to IATA:	Not applicable

##### 14.4 Packing group

Surface transport according to ADR/RID:	Not applicable
Inland waterway transport (ADN):	Not applicable
Transport by sea according to IMDG:	Not applicable
Air transport according to IATA:	Not applicable

##### 14.5 Environmental hazards

Surface transport according to ADR/RID:	No
Inland waterway transport (ADN):	No
Transport by sea according to IMDG:	No
Air transport according to IATA:	No

##### 14.6 Special precautions for user

No information available.  
Appropriate information in SECTIONS 6 to 8.

##### 14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

No information available.

#### SECTION 15: REGULATORY INFORMATION

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

EU REGULATIONS	2008/98/EC (2000/532/EC); 2010/75/EU; 2004/42/EC; (EC) 648/2004; (EC) 1907/2006 (REACH); (EU) 1272/2008; 75/324/EEC ((EC) 2016/2037); (EU) 2020/878; (EU) 2016/131; (EU) 517/2014
TRANSPORT REGULATIONS:	ADR (2021); IMDG code (2021, 40. Amdt.); IATA-DGR (2021)
NATIONAL REGULATIONS (DE):	Hazardous Substances Ordinance - GefStoffV 2016; Detergents and Cleaning Agents Act - WRMG; Water Resources Act - WHG; TRGS: 200, 220, 510, 615, 900, 903, 905.
- Water hazard class:	2, pursuant to AwSV dated 18.04.2017
- Hazardous Incident Ordinance:	Not applicable
- Classification according to TA-Air:	5.2.5 Organic substances
- GISBAU, product code:	Not determined
- Storage class (TRGS 510):	LGK 10: Flammable liquids
- Restrictions of occupation:	Yes
- VOC (2010/75/EU):	Not relevant
- Other regulations TRGS 401:	Hazard due to skin contact. - Determination, assessment, measures.
- DGVV Information 213-070:	Acids and bases (Bulletin M 004 in the series 'Hazardous Substances') TRGS 510: Storage of hazardous substances in non-stationary containers

##### 15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture have not been conducted.

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#### SECTION 16: OTHER INFORMATION

##### 16.1 Hazard statements (SECTION 3)

H411 Toxic to aquatic life with long lasting effects.  
H317 May cause an allergic skin reaction.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.

##### 16.2 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route  
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses  
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure  
AVV = European Waste Directory  
ATE = acute toxicity estimate  
BGI = Information from trade associations  
CAS = Chemical Abstracts Service  
CLP = Classification, Labelling and Packaging  
DMEL = Derived Minimum Effect Level  
DNEL = Derived No Effect Level  
EC50 = Median effective concentration  
ECB = European Chemicals Bureau  
EEC = European Economic Community  
EINECS = European Inventory of Existing Commercial Chemical Substances  
EL50 = Median effective loading  
ELINCS = European List of Notified Chemical Substances  
EmS = Emergency Schedules  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IATA = International Air Transport Association  
IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk  
IC50 = Inhibition concentration, 50%  
IFA = Institute for Occupational Safety and Health of the German Statutory Accident Insurance  
IMDG = International Maritime Code for Dangerous Goods  
IUCLID = International Uniform Chemical Information Database  
IVIS = In-vitro irritation score  
LC50 = Lethal concentration, 50%  
LD50 = Median lethal dose  
LCO = Lethal concentration, 0%  
LOAEL = Lowest observed adverse effect level  
LGK = Storage Class  
LL50 = Median lethal loading  
LQ = Limited Quantities  
MARPOL = International Convention for the Prevention of Marine Pollution from Ships  
NOAEL = No Observed Adverse Effect Level  
NOEC = No Observed Effect Concentration  
PBT = Persistent, Bioaccumulative and Toxic substance  
PNEC = Predicted No-Effect Concentration  
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals  
STP = Sewage Treatment Plant  
TA-Air = Technical instructions on air quality control  
TLV®/TWA = Threshold limit value - time-weighted average  
TLV®STEL = Threshold limit value - short-time exposure limit  
TRGS = Technical rules for hazardous substances  
VOC = Volatile Organic Compounds  
vPvB = very Persistent and very Bioaccumulative  
AwSV: Ordinance on installations for handling substances hazardous to water

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**16.3 Other information**

Customs tariff: Not determined

Classification method: Skin Irrit. 2: H315 Causes skin irritation. (calculation method)  
Eye Irrit. 2: H319 Causes serious eye irritation. ()  
Skin Sens. 1: H317 May cause an allergic skin reaction. ()  
Aquatic Chronic 3: H412 Harmful to aquatic life with long lasting effects. ()

Changed position: SECTION 3 Deleted: Magnesium carbonate  
SECTION 3 Added: 2,2'-[(1-Methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane  
SECTION 2 Added: 2,2'-[(1-Methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane  
SECTION 3 Added: Reaction product: Bisphenol-F-epichlorohydrin resins with an average molecular weight  $\leq 700$   
SECTION 2 Added: Reaction product: Bisphenol-F-epichlorohydrin resins with an average molecular weight  $\leq 700$   
SECTION 2 Deleted: Reaction product: Bisphenol-A-epichlorohydrin resins with an average molecular weight  $\leq 700$   
SECTION 2 Deleted: Environment  
SECTION 2 Deleted: Aquatic Chronic 2  
SECTION 2 Added: H412 Harmful to aquatic life with long lasting effects.  
SECTION 2 Deleted: H411 Toxic to aquatic life with long lasting effects.  
SECTION 2 Deleted: P391 Collect spillage.  
SECTION 2 Added: Aquatic Chronic 3  
SECTION 14 Added: Not classified as dangerous goods  
SECTION 14 Deleted: Environmentally hazardous substance, solid, n.o.s. (epoxy resin (bisphenol-F-epichlorohydrin resins, molecular weight  $\leq 700$ ))  
SECTION 14 Added: Not classified as dangerous goods  
SECTION 14 Deleted: Environmentally hazardous substance, solid, n.o.s. (Epoxy resin (Reaction product of epichlorohydrin & bisphenol F, number average molecular weight  $\leq 700$ ))  
SECTION 14 Added: Not classified as dangerous goods  
SECTION 14 Deleted: Environmentally hazardous substance, solid, n.o.s. (Epoxy resin (Reaction product of epichlorohydrin & bisphenol F, number average molecular weight  $\leq 700$ ))