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

1.1 Product identifier
   Trade name : Biresin® G32 Part A

1.2 Relevant identified uses of the substance or mixture and uses advised against
   Product use : Tooling system

1.3 Details of the supplier of the safety data sheet
   Company name of supplier : Sika Deutschland GmbH
   Kornwestheimer Str. 103-107
   D-70439 Stuttgart
   Telephone : +49 711 8009 0
   E-mail address of person responsible for the SDS : EHS@de.sika.com

1.4 Emergency telephone number
   Emergency CONTACT (24-Hour-Number):
   GBK GmbH Global Regulatory Compliance +49(0)6132-84463

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
   Classification (REGULATION (EC) No 1272/2008)
   Skin irritation, Category 2  H315: Causes skin irritation.
   Eye irritation, Category 2  H319: Causes serious eye irritation.
   Skin sensitisation, Category 1  H317: May cause an allergic skin reaction.
   Long-term (chronic) aquatic hazard, Category 2  H411: Toxic to aquatic life with long lasting effects.

2.2 Label elements
   Labelling (REGULATION (EC) No 1272/2008)
   Hazard pictograms : 
   Signal word : Warning
   Hazard statements : 
   H315  Causes skin irritation.
   H317  May cause an allergic skin reaction.
   H319  Causes serious eye irritation.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements:

Prevention:
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear protective gloves/ eye protection/ face protection.

Response:
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P391 Collect spillage.

Hazardous components which must be listed on the label:
- reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700)
- 1,6-bis(2,3-epoxypropoxy)hexane

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>EC-No.</th>
<th>Registration number</th>
<th>Classification</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700)</td>
<td>25068-38-6</td>
<td>500-033-5</td>
<td>01-2119456619-26-XXXX</td>
<td>Eye Irrit. 2; H319 Skin Irrit. 2; H315 Skin Sens. 1; H317 Aquatic Chronic 2; H411</td>
<td>&gt;= 25 - &lt; 40</td>
</tr>
<tr>
<td>bis(isopropyl)naphthalene</td>
<td>38640-62-9</td>
<td>254-052-6</td>
<td>01-2119565150-48-XXXX</td>
<td>Asp. Tox. 1; H304 Aquatic Chronic 1; H410</td>
<td>&gt;= 5 - &lt; 10</td>
</tr>
<tr>
<td>1,6-bis(2,3-epoxypropoxy)hexane</td>
<td>16096-31-4</td>
<td>618-939-5</td>
<td>240-260-4</td>
<td>01-2119463471-41-XXXX (covered by CAS 933999-84-9)</td>
<td>Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1; H317 Aquatic Chronic 3; H412</td>
</tr>
</tbody>
</table>
SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : Move out of dangerous area.
Consult a physician.
Show this safety data sheet to the doctor in attendance.

If inhaled : Move to fresh air.
Consult a physician after significant exposure.

In case of skin contact : Take off contaminated clothing and shoes immediately.
Wash off with soap and plenty of water.
If symptoms persist, call a physician.

In case of eye contact : Immediately flush eye(s) with plenty of water.
Remove contact lenses.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.

If swallowed : Do not induce vomiting without medical advice.
Rinse mouth with water.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : Allergic reactions
Excessive lachrymation
Erythema
Dermatitis
See Section 11 for more detailed information on health effects and symptoms.

Risks : irritant effects
sensitising effects
Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : In case of fire, use water/water spray/water jet/carbon dioxide/sand/foam/alcohol resistant foam/chemical powder for extinction.
5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting: Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products: No hazardous combustion products are known

5.3 Advice for firefighters

Special protective equipment for firefighters: In the event of fire, wear self-contained breathing apparatus.

Further information: Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions: Use personal protective equipment. Deny access to unprotected persons.

6.2 Environmental precautions

Environmental precautions: Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For personal protection see section 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling: Do not breathe vapours or spray mist. Avoid exceeding the given occupational exposure limits (see section 8). Do not get in eyes, on skin, or on clothing. For personal protection see section 8. Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should
not be employed in any process in which this mixture is being used. Smoking, eating and drinking should be prohibited in the application area. Follow standard hygiene measures when handling chemical products.

Advice on protection against fire and explosion: Normal measures for preventive fire protection.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers: Keep container tightly closed in a dry and well-ventilated place. Store in accordance with local regulations.

Storage class (TRGS 510): 10, Combustible liquids

Further information on storage stability: No decomposition if stored and applied as directed.

7.3 Specific end use(s)

Specific use(s): Consult most current local Product Data Sheet prior to any use.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Personal protective equipment

Eye protection: Safety glasses with side-shields conforming to EN166
Eye wash bottle with pure water

Hand protection: Chemical-resistant, impervious gloves complying with an approved standard must be worn at all times when handling chemical products. Reference number EN 374. Follow manufacturer specifications.

Suitable for short time use or protection against splashes:
Butyl rubber/nitrile rubber gloves (0.4 mm)
Contaminated gloves should be removed.
Suitable for permanent exposure:
Viton gloves (0.4 mm), breakthrough time >30 min.

Skin and body protection: Protective clothing (e.g. Safety shoes acc. to EN ISO 20345,
long-sleeved working clothing, long trousers). Rubber aprons and protective boots are additionally recommended for mixing and stirring work.

Respiratory protection  :  No special measures required.

Environmental exposure controls
General advice  :  Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties
Appearance  :  paste
Colour  :  various
Odour  :  characteristic
Odour Threshold  :  No data available
pH  :  Not applicable
Melting point/range / Freezing point  :  No data available
Boiling point/boiling range  :  No data available
Flash point  :  > 101 °C
Method: closed cup
Evaporation rate  :  No data available
Flammability (solid, gas)  :  No data available
Upper explosion limit / Upper flammability limit  :  No data available
Lower explosion limit / Lower flammability limit  :  No data available
Vapour pressure  :  0,01 hPa
Relative vapour density  :  No data available
Density  :  ca. 1,7 g/cm³ (20 °C)
Solubility(ies)  :  insoluble
Solubility in other solvents : No data available
Partition coefficient: n-octanol/water : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Viscosity
Viscosity, dynamic : ca. 14.000 mPa.s (23 °C)
Viscosity, kinematic : > 20,5 mm²/s (40 °C)
Explosive properties : No data available
Oxidizing properties : No data available

9.2 Other information
No data available

SECTION 10: Stability and reactivity

10.1 Reactivity
No dangerous reaction known under conditions of normal use.

10.2 Chemical stability
The product is chemically stable.

10.3 Possibility of hazardous reactions
Hazardous reactions : Stable under recommended storage conditions.

10.4 Conditions to avoid
Conditions to avoid : No data available

10.5 Incompatible materials
Materials to avoid : No data available

10.6 Hazardous decomposition products
No decomposition if stored and applied as directed.

SECTION 11: Toxicological information

11.1 Information on toxicological effects
Acute toxicity
Not classified based on available information.
Components:

**reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700):**
- Acute oral toxicity: LD50 Oral (Rat): > 5.000 mg/kg
- Acute dermal toxicity: LD50 Dermal (Rabbit): > 20.000 mg/kg

**bis(isopropyl)naphthalene:**
- Acute oral toxicity: LD50 Oral (Rat): > 3.900 mg/kg
- Acute inhalation toxicity: LC50 (Rat): > 5.64 mg/l
  - Exposure time: 4 h
  - Test atmosphere: dust/mist
- Acute dermal toxicity: LD50 Dermal (Rabbit): > 4.500 mg/kg

**1,6-bis(2,3-epoxypropoxy)hexane:**
- Acute oral toxicity: LD50 Oral (Rat): 2.900 mg/kg
- Acute dermal toxicity: LD50 Dermal (Rabbit): > 2.000 mg/kg

**Skin corrosion/irritation**
Causes skin irritation.

**Serious eye damage/eye irritation**
Causes serious eye irritation.

**Respiratory or skin sensitisation**

**Skin sensitisation**
May cause an allergic skin reaction.

**Respiratory sensitisation**
Not classified based on available information.

**Germ cell mutagenicity**
Not classified based on available information.

**Carcinogenicity**
Not classified based on available information.

**Reproductive toxicity**
Not classified based on available information.

**STOT - single exposure**
Not classified based on available information.

**STOT - repeated exposure**
Not classified based on available information.

**Aspiration toxicity**
Not classified based on available information.
SECTION 12: Ecological information

12.1 Toxicity

Components:
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700):
Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 2 mg/l
Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 1,8 mg/l
Exposure time: 48 h

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Product: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher..

12.6 Other adverse effects

Product: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product: In accordance with the EWC Waste Regulation the classification of waste is to be assigned to the jurisdiction of the origin of waste. Therefore, it is not possible to assign a particular waste identification number. Completely emptied packagings may be given for recycling. Empty packaging may still contain hazardous residues. Empty packaging should be removed by a licensed waste contractor. Sika has agreed disposal contracts for all packaging which is brought into circulation in Germany. For further details see www.sika.de
SECTION 14: Transport information

14.1 UN number

ADR : UN 3082
IMDG : UN 3082
IATA : UN 3082

14.2 UN proper shipping name

ADR : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
      ((epoxy resin))
IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
      (epoxy resin)
IATA : Environmentally hazardous substance, liquid, n.o.s.
      ((epoxy resin))

14.3 Transport hazard class(es)

ADR : 9
IMDG : 9
IATA : 9

14.4 Packing group

ADR
      Packing group : III
      Classification Code : M6
      Hazard Identification Number : 90
      Labels : 9
      Tunnel restriction code : (-)
      Remarks : Transport in accordance with special provision 375

IMDG
      Packing group : III
      Labels : 9
      EmS Code : F-A, S-F
      Remarks : Transport in accordance with 2.10.2.7 of the IMDG-Code

IATA (Cargo)
      Packing instruction (cargo aircraft) : 964
      Packing instruction (LQ) : Y964
      Packing group : III
      Labels : Miscellaneous Dangerous Goods
      Remarks : Transport in accordance with special regulation A 197
IATA (Passenger)  
Packing instruction (passenger aircraft) : 964  
Packing instruction (LQ) : Y964  
Packing group : III  
Labels : Miscellaneous Dangerous Goods

14.5 Environmental hazards

ADR  
Environmentally hazardous : yes

IMDG  
Marine pollutant : yes

IATA (Passenger)  
Environmentally hazardous : yes

IATA (Cargo)  
Environmentally hazardous : yes

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

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

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

International Chemical Weapons Convention (CWC) : Not applicable
Schedules of Toxic Chemicals and Precursors : Not applicable

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59) : None of the components are listed (=> 0.1 %).

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

Regulation (EC) No 850/2004 on persistent organic pollutants : Not applicable

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals : Not applicable

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) : Conditions of restriction for the following entries should be considered: Number on list 3
SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006
Biresin® G32 Part A

Revision Date 15.07.2019 Version 6.0 Print Date 15.07.2019

REACH Information:
- All substances contained in our Products are registered by our upstream suppliers, and/or
- registered by us, and/or
- excluded from the regulation, and/or
- exempted from the registration.

E2 ENVIRONMENTAL HAZARDS

Water contaminating class (Germany):
- WGK 3 highly hazardous to water Classification according to AwSV, Annex 1 (5.2)

Volatile organic compounds:
- Law on the incentive tax for volatile organic compounds (VOCV)
  - no VOC duties
Direcive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control)
- Not applicable

Other regulations:
- Product is no subject to the Chemicals Prohibition Ordinance.

15.2 Chemical safety assessment
- No Chemical Safety Assessment has been carried out for this mixture by the supplier.

SECTION 16: Other information

Full text of H-Statements
H304 : May be fatal if swallowed and enters airways.
H315 : Causes skin irritation.
H317 : May cause an allergic skin reaction.
H319 : Causes serious eye irritation.
H410 : Very toxic to aquatic life with long lasting effects.
H411 : Toxic to aquatic life with long lasting effects.
H412 : Harmful to aquatic life with long lasting effects.

Full text of other abbreviations
- Aquatic Chronic: Long-term (chronic) aquatic hazard
- Asp. Tox.: Aspiration hazard
- Eye Irrit.: Eye irritation
- Skin Irrit.: Skin irritation
- Skin Sens.: Skin sensitisation
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- CAS: Chemical Abstracts Service
- DNEL: Derived no-effect level
- EC50: Half maximal effective concentration
GHS : Globally Harmonized System
IATA : International Air Transport Association
IMDG : International Maritime Code for Dangerous Goods
LD50 : Median lethal dosis (the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals)
LC50 : Median lethal concentration (concentrations of the chemical in air that kills 50% of the test animals during the observation period)
OEL : Occupational Exposure Limit
PBT : Persistent, bioaccumulative and toxic
PNEC : Predicted no effect concentration
SVHC : Substances of Very High Concern
vPvB : Very persistent and very bioaccumulative

Further information

Classification of the mixture:

<table>
<thead>
<tr>
<th>Skin Irrit. 2</th>
<th>H315</th>
<th>Calculation method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye Irrit. 2</td>
<td>H319</td>
<td>Calculation method</td>
</tr>
<tr>
<td>Skin Sens. 1</td>
<td>H317</td>
<td>Calculation method</td>
</tr>
<tr>
<td>Aquatic Chronic 2</td>
<td>H411</td>
<td>Calculation method</td>
</tr>
</tbody>
</table>

The information contained in this Safety Data Sheet corresponds to our level of knowledge at the time of publication. All warranties are excluded. Our most current General Sales Conditions shall apply. Please consult the product data sheet prior to any use and processing.

Changes as compared to previous version!

DE / EN