According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



## Biresin® S8 (A)

Date of last issue: 28.10.2022 Version 3.2 Print Date 12.06.2023

Revision Date: 12.06.2023

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

1.1 Product identifier

Trade name : Biresin® S8 (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 Limited

Watchmead Welwyn Garden City

Hertfordshire. AL7 1BQ

Telephone : +44 (0)1707 394444
Telefax : +44 (0)1707 329129
E-mail address of person : EHS@uk.sika.com

responsible for the SDS

1.4 Emergency telephone number

National Chemical Emergency Centre (NCEC) 24 Hour Emergency Telephone Number +44 870 190 6777

## **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.

Serious eye damage, Category 1 H318: Causes serious eye damage.
Skin sensitisation, Category 1 H317: May cause an allergic skin reaction.

Long-term (chronic) aquatic hazard, Cat-H411: Toxic to aquatic life with long lasting effects.

egory 2

#### 2.2 Label elements

#### Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms





Signal word : Danger

Hazard statements : H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H411 Toxic to aquatic life with long lasting effects.

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



## Biresin® S8 (A)

Revision Date: 12.06.2023

Precautionary statements : Prevention:

P261 Avoid breathing mist or vapours.
P264 Wash skin thoroughly after handling.
P273 Avoid release to the environment.

P280 Wear protective gloves/ eye protection/ face

protection.

Response:

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously

with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON

CENTER/ doctor.

P391 Collect spillage.

### Hazardous components which must be listed on the label:

bis-[4-(2,3-epoxipropoxi)phenyl]propane 1,4-bis(2,3 epoxypropoxy)butane

#### 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.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

## **SECTION 3: Composition/information on ingredients**

#### 3.2 Mixtures

#### Components

Chemical name	CAS-No.	Classification	Concentration
	EC-No.		(% w/w)
	Registration number		
Phenol, polymer with formalde-	28064-14-4	Aquatic Chronic 4;	>= 40 - < 60
hyde, glycidyl ether	Not Assigned	H413	

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



## Biresin® S8 (A)

bis-[4-(2,3-epoxipropoxi)phenyl]propane	1675-54-3 216-823-5 01-2119456619-26- XXXX	Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1; H317 Aquatic Chronic 2; H411  specific concentration limit Eye Irrit. 2; H319 >= 5 % Skin Irrit. 2; H315 >= 5 %	>= 25 - < 40
1,4-bis(2,3 epoxypropoxy)butane	2425-79-8 219-371-7 01-2119494060-45- XXXX	Aquatic Chronic 3; H412 Acute Tox. 4; H302 Acute Tox. 4; H332 Acute Tox. 4; H312 Skin Irrit. 2; H315 Skin Sens. 1; H317 Eye Dam. 1; H318 Acute toxicity estimate	>= 5 - < 10

For explanation of abbreviations see section 16.

## **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.

Acute oral toxicity: 1.163 mg/kg

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 : Small amounts splashed into eyes can cause irreversible tis-

sue damage and blindness.

In the case of contact with eyes, rinse immediately with plenty

of water and seek medical advice.

Continue rinsing eyes during transport to hospital.

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



## Biresin® S8 (A)

Date of last issue: 28.10.2022 Version 3.2 Print Date 12.06.2023

Revision Date: 12.06.2023

Remove contact lenses.

Keep eye wide open while rinsing.

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** 

Ervthema 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 damage.

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 diox-

ide/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.

ucts

Hazardous combustion prod- : No hazardous combustion products are known

5.3 Advice for firefighters

for firefighters

Special protective equipment : 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.

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



## Biresin® S8 (A)

Revision Date: 12.06.2023

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 : 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 ap-

plication 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.

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



## Biresin® S8 (A)

Revision Date: 12.06.2023

#### 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.

Further information on stor-

age 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

Components	CAS-No.	Value type (Form	Control parame-	Basis *
		of exposure)	ters *	

Contains no substances with occupational exposure limit values.

#### 8.2 Exposure controls

#### **Engineering measures**

Maintain air concentrations below occupational exposure standards.

Ensure adequate ventilation, especially in confined areas.

#### Personal protective equipment

Eye/face protection : Safety glasses with side-shields conforming to EN166

Eve wash bottle with pure water

Hand protection : Chemical-resistant, impervious gloves complying with an ap-

proved standard must be worn at all times when handling chemical products. Reference number EN 374. Follow manu-

facturer specifications.

Suitable for short time use or protection against splashes:

Butyl rubber/nitrile rubber gloves (> 0,1 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.

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



# Biresin® S8 (A)

Revision Date: 12.06.2023

## **SECTION 9: Physical and chemical properties**

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

Physical state : liquid
Appearance : paste
Colour : black
Odour : characteristic

Melting point/range / Freezing :

point

No data available

Boiling point/boiling range : No data available

Flammability (solid, gas) : No data available

Upper/lower flammability or explosive limits

Upper explosion limit / Up- :

per flammability limit

No data available

Lower explosion limit /

Lower flammability limit

: No data available

Flash point : > 101 °C

Method: closed cup

Auto-ignition temperature : No data available

Decomposition temperature : No data available

pH : Not applicable

substance/mixture is non-soluble (in water)

**Viscosity** 

Viscosity, dynamic : ca. 120.000 mPa.s (20 °C)

Viscosity, kinematic : > 20,5 mm2/s (40 °C)

Solubility(ies)

Water solubility : insoluble

Partition coefficient: n-

octanol/water

: No data available

Vapour pressure : 0,1 hPa

Density : ca. 1,21 g/cm3 (23 °C)

Relative vapour density : No data available

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



## Biresin® S8 (A)

Revision Date: 12.06.2023

Particle characteristics : 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 hazard classes as defined in Regulation (EC) No 1272/2008

## **Acute toxicity**

Not classified based on available information.

#### **Components:**

## bis-[4-(2,3-epoxipropoxi)phenyl]propane:

Acute oral toxicity : LD50 Oral (Rat): > 5.000 mg/kg

Acute dermal toxicity : LD50 Dermal (Rabbit): > 5.000 mg/kg

#### 1,4-bis(2,3 epoxypropoxy)butane:

Acute oral toxicity : LD50 Oral (Rat): 1.163 mg/kg

Acute toxicity estimate: 1.163 mg/kg

Method: Calculation method

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



## Biresin® S8 (A)

Date of last issue: 28.10.2022 Version 3.2 Print Date 12.06.2023

Revision Date: 12.06.2023

#### Skin corrosion/irritation

Causes skin irritation.

#### Serious eye damage/eye irritation

Causes serious eye damage.

## 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.

#### 11.2 Information on other hazards

#### **Endocrine disrupting properties**

#### **Product:**

Assessment : The substance/mixture does not contain components consid-

ered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

## **SECTION 12: Ecological information**

## 12.1 Toxicity

## **Components:**

## bis-[4-(2,3-epoxipropoxi)phenyl]propane:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 2 mg/l

Exposure time: 96 h

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



## Biresin® S8 (A)

Date of last issue: 28.10.2022 Version 3.2 Print Date 12.06.2023

Revision Date: 12.06.2023

aquatic invertebrates

Toxicity to daphnia and other : 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:**

Assessment 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 Endocrine disrupting properties

#### **Product:**

Assessment The substance/mixture does not contain components consid-

> ered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

## 12.7 Other adverse effects

## **Product:**

Additional ecological infor-

mation

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** The generation of waste should be avoided or minimized

wherever possible.

Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe

Dispose of surplus and non-recyclable products via a licensed

waste disposal contractor.

Disposal of this product, solutions and any by-products should

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



## Biresin® S8 (A)

Date of last issue: 28.10.2022 Version 3.2 Print Date 12.06.2023

Revision Date: 12.06.2023

at all times comply with the requirements of environmental protection and waste disposal legislation and any regional

local authority requirements.

Avoid dispersal of spilled material and runoff and contact with

soil, waterways, drains and sewers.

## **SECTION 14: Transport information**

#### 14.1 UN number or ID 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)

Class Subsidiary risks

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 : (-)

**IMDG** 

Packing group : III
Labels : 9
EmS Code : F-A, S-F

IATA (Cargo)

Packing instruction (cargo : 964

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



## Biresin® S8 (A)

Date of last issue: 28.10.2022 Version 3.2 Print Date 12.06.2023

Revision Date: 12.06.2023

aircraft)

Packing instruction (LQ) : Y964
Packing group : III

Labels : Miscellaneous

IATA (Passenger)

Packing instruction (passen- : 964

ger aircraft)

Packing instruction (LQ) : Y964
Packing group : III

Labels : Miscellaneous

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 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

## **SECTION 15: Regulatory information**

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture** Relevant EU provisions transposed through retained EU law

UK REACH List of restrictions (Annex 17) : Not applicable

International Chemical Weapons Convention (CWC)

Schedules of Toxic Chemicals and Precursors

: Not applicable

Regulation (EC) No 1005/2009 on substances that de-

plete the ozone layer

Not applicable

GB Export and import of hazardous chemicals - Prior

Informed Consent (PIC) Regulation

Not applicable

Control of Major Accident Hazards Regulations E2 ENVIRONMENTAL HAZARDS

2015 (COMAH)

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



## Biresin® S8 (A)

Date of last issue: 28.10.2022 Version 3.2 Print Date 12.06.2023

Revision Date: 12.06.2023

Volatile organic compounds : Law on the incentive tax for volatile organic compounds

(VOCV)

Volatile organic compounds (VOC) content: 0,3% w/w

no VOC duties

Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control) Volatile organic compounds (VOC) content: 0,3% w/w

If other regulatory information applies that is not already provided elsewhere in the Safety Data Sheet, then it is described in this subsection.

Health, safety and environmental regulation/legislation specific for the substance or mixture: : Environmental Protection Act 1990 & Subsidiary Regulations Health and Safety at Work Act 1974 & Subsidiary Regulations Control of Substances Hazardous to Health Regulations

(COSHH)

May be subject to the Control of Major Accident Hazards

Regulations (COMAH), and amendments.

## 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**

H302 : Harmful if swallowed. H312 : Harmful in contact with skin.

H315 : Causes skin irritation.

H317 : May cause an allergic skin reaction.
H318 : Causes serious eye damage.
H319 : Causes serious eye irritation.

H332 : Harmful if inhaled.

H411 : Toxic to aquatic life with long lasting effects.
 H412 : Harmful to aquatic life with long lasting effects.
 H413 : May cause long lasting harmful effects to aquatic life.

## Full text of other abbreviations

Acute Tox. : Acute toxicity

Aquatic Chronic : Long-term (chronic) aquatic hazard

Eye Dam. : Serious eye damage

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

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



# Biresin® S8 (A)

Date of last issue: 28.10.2022 Version 3.2 Print Date 12.06.2023

Revision Date: 12.06.2023

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)

MARPOL : International Convention for the Prevention of Pollution from

Ships, 1973 as modified by the Protocol of 1978

OEL : Occupational Exposure Limit

PBT : Persistent, bioaccumulative and toxic
PNEC : Predicted no effect concentration

REACH : Regulation (EC) No 1907/2006 of the European Parliament

and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency

SVHC : Substances of Very High Concern

vPvB : Very persistent and very bioaccumulative

#### **Further information**

## Classification of the mixture: Classification procedure:

Skin Irrit. 2	H315	Calculation method
Eye Dam. 1	H318	Calculation method
Skin Sens. 1	H317	Calculation method
Aquatic Chronic 2	H411	Calculation method

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!

GB / EN