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

1.1 Product identifier

Trade name : Biresin® CH132-5 Part B

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

Product use : Composites system, Product is not intended for consumer use

1.3 Details of the supplier of the safety data sheet

Company : Sika CZ s.r.o.
Bystrcká 1132/36
624 00 Brno
Telephone : +420546422464
E-mail address : EHS@cz.sika.com

1.4 Emergency telephone number

Emergency telephone number : Toxikologické informační středisko:
+420 224 91 92 93
EHS@cz.sika.com

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Type of product : Mixture

Classification (REGULATION (EC) No 1272/2008)

Acute toxicity, Category 4	H302: Harmful if swallowed.
Skin corrosion, Category 1B	H314: Causes severe skin burns and eye damage.
Serious eye damage, Category 1	H318: Causes serious eye damage.
Skin sensitisation, Category 1	H317: May cause an allergic skin reaction.
Specific target organ toxicity - repeated exposure, Category 2	H373: May cause damage to organs through prolonged or repeated exposure.
Chronic aquatic toxicity, Category 3	H412: Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :

Signal word : Danger

Hazard statements :

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

Supplemental Hazard Statements : EUH071 Corrosive to the respiratory tract.

Precautionary statements :

Prevention:

P260	Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P273	Avoid release to the environment.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 + P310	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
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.

Hazardous components which must be listed on the label:

- 220-666-8 3-aminomethyl-3,5,5-trimethylcyclohexylamine
- 217-168-8 4,4'-methylenebis(cyclohexylamine)
- 216-032-5 m-phenylenebis(methylamine)

Additional Labelling:

EUH205 Contains epoxy constituents. May produce an allergic reaction.

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

Hazardous components

Chemical name CAS-No. EC-No. Registration number	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
3-aminomethyl-3,5,5-trimethylcyclohexylamine 2855-13-2 220-666-8 01-2119514687-32-XXXX	Acute Tox.4; H302 Acute Tox.4; H312 Skin Corr.1B; H314 Skin Sens.1A; H317 Aquatic Chronic3; H412 Eye Dam.1; H318	>= 50 - <= 100
4,4'-methylenebis(cyclohexylamine) 1761-71-3 217-168-8 01-2119541673-38-XXXX	Acute Tox.4; H302 Skin Corr.1B; H314 Eye Dam.1; H318 Skin Sens.1B; H317 STOT RE2; H373	>= 25 - < 50
Polyoxypropylentriamine 39423-51-3 500-105-6 01-2119556886-20-XXXX	Acute Tox.4; H302 Acute Tox.4; H312 Eye Dam.1; H318 Aquatic Chronic2; H411	>= 5 - < 10
m-phenylenebis(methylamine) 1477-55-0 216-032-5 01-2119480150-50-XXXX	Acute Tox.4; H302 Acute Tox.4; H332 Skin Corr.1B; H314 Skin Sens.1; H317 Aquatic Chronic3; H412	>= 5 - < 10

For the full text of the H-Statements mentioned in this Section, 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.

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.
Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.

In case of eye contact : Small amounts splashed into eyes can cause irreversible tissue 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.
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 : Gastrointestinal discomfort
Allergic reactions
Dermatitis
See Section 11 for more detailed information on health effects and symptoms.

Risks : Health injuries may be delayed.
corrosive effects
sensitising effects

Harmful if swallowed.
May cause an allergic skin reaction.
Causes serious eye damage.
May cause damage to organs through prolonged or repeated exposure.
Corrosive to the respiratory tract.
Causes severe burns.

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 : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2 Special hazards arising from the substance or mixture

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	:	Standard procedure for chemical fires.

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 materials 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 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. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in accordance with local regulations.
Other data	:	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 Wear eye/face protection.
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 additionaly 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	:	liquid
Colour	:	blue
Odour	:	amine-like
Odour Threshold	:	No data available
Flash point	:	> 101 °C
Autoignition temperature	:	No data available
Decomposition temperature	:	No data available
Lower explosion limit (Vol-%)	:	No data available
Upper explosion limit (Vol-%)	:	No data available
Flammability	:	No data available
Explosive properties	:	No data available
Oxidizing properties	:	No data available
pH	:	Not applicable
Melting point/range / Freezing point	:	No data available
Boiling point/boiling range	:	No data available
Vapour pressure	:	No data available
Density	:	ca.0,93 g/cm3 at 20 °C
Water solubility	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Viscosity, dynamic	:	ca.10 mPa.s

at 20 °C

Viscosity, kinematic	:	< 20,5 mm2/s at 40 °C
Relative vapour density	:	No data available
Evaporation rate	:	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

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

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Harmful if swallowed.

Components:

3-aminomethyl-3,5,5-trimethylcyclohexylamine:

Acute oral toxicity	:	LD50 Oral (Rat): 1.030 mg/kg
Acute inhalation toxicity	:	LC50 (Rat): > 5,01 mg/l Exposure time: 4 h Test atmosphere: dust/mist

Acute dermal toxicity : LD50 Dermal (Rabbit): > 2.000 mg/kg

4,4'-methylenebis(cyclohexylamine):
Acute oral toxicity : LD50 Oral (Rat): 380 mg/kg

Acute dermal toxicity : LD50 Dermal (Rabbit): 2.110 mg/kg

Polyoxypropylentriamine:
Acute oral toxicity : LD50 Oral (Rat): > 550 mg/kg

Acute dermal toxicity : LD50 Dermal (Rabbit): > 1.001 mg/kg

m-phenylenebis(methylamine):
Acute oral toxicity : LD50 Oral (Rat): 930 mg/kg

Acute inhalation toxicity : LC50 (Rat): 1,34 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 Dermal (Rat): > 3.100 mg/kg

Skin corrosion/irritation

Causes severe burns.

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.

Components:

3-aminomethyl-3,5,5-trimethylcyclohexylamine:
Assessment: The product is a skin sensitiser, sub-category 1A.
Result: The product is a skin sensitiser, sub-category 1A.

4,4'-methylenebis(cyclohexylamine):
Test Type: Buehler Test
Assessment: The product is a skin sensitiser, sub-category 1B.
Result: The product is a skin sensitiser, sub-category 1B.

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

Corrosive to the respiratory tract.

STOT - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration toxicity

Not classified based on available information.

SECTION 12: Ecological information

12.1 Toxicity

Components:

3-aminomethyl-3,5,5-trimethylcyclohexylamine :

Toxicity to algae	:	ErC50: > 10 - 100 mg/l, 72 h, Desmodesmus subspicatus (green algae)

4,4'-methylenebis(cyclohexylamine) :

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	EC50: 6,84 mg/l, 48 h, Daphnia magna (Water flea)

m-phenylenebis(methylamine) :

Toxicity to fish	:	LC50: > 10 - 100 mg/l, 96 h, Oryzias latipes (Japanese medaka)
Toxicity to daphnia and other aquatic invertebrates	:	EC50: > 10 - 100 mg/l, 48 h, Daphnia magna (Water flea)

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 Other adverse effects

Product:

Additional ecological information	:	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful 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 way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should 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.
Contaminated packaging	:	15 01 10* packaging containing residues of or contaminated by dangerous substances

SECTION 14: Transport information

ADR

14.1 UN number	:	2735
14.2 UN proper shipping name	:	AMINES, LIQUID, CORROSIVE, N.O.S. (3-aminomethyl-3,5,5-trimethylcyclohexylamine, 4,4'-methylenebis(cyclohexylamine))
14.3 Transport hazard class(es)	:	8
14.4 Packing group	:	II
Classification Code	:	C7
Labels	:	8
Tunnel restriction code	:	(E)
14.5 Environmental hazards	:	no

IATA

14.1 UN number	:	2735
14.2 UN proper shipping name	:	Amines, liquid, corrosive, n.o.s. (3-aminomethyl-3,5,5-trimethylcyclohexylamine, 4,4'-methylenebis(cyclohexylamine))
14.3 Transport hazard class(es)	:	8
14.4 Packing group	:	II
Labels	:	8
14.5 Environmental hazards	:	no

IMDG

14.1 UN number	:	2735
14.2 UN proper shipping name	:	AMINES, LIQUID, CORROSIVE, N.O.S. (3-aminomethyl-3,5,5-trimethylcyclohexylamine, 4,4'-methylenebis(cyclohexylamine))
14.3 Class	:	8
14.4 Packing group	:	II
Labels	:	8
EmS Number 1	:	F-A
EmS Number 2	:	S-B
14.5 Marine pollutant	:	no

14.6 Special precautions for user
No data available

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
Not applicable

SECTION 15: Regulatory information

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

Prohibition/Restriction

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
REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII)	:	Not applicable

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

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.
Not applicable

VOC-CH (VOCV)	:	< 0,01 % no VOC duties
VOC-EU (solvent)	:	< 0,01 %

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.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure if swallowed.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox.	Acute toxicity
Aquatic Chronic	Chronic aquatic toxicity
Eye Dam.	Serious eye damage
Skin Corr.	Skin corrosion
Skin Sens.	Skin sensitisation
STOT RE	Specific target organ toxicity - repeated exposure
ADR	Accord européen relatif au transport international des marchandises Dangereuses par Route
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)
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

Classification of the mixture:		**Classification procedure:**
Acute Tox. 4	H302	Calculation method
Skin Corr. 1B	H314	Calculation method
Eye Dam. 1	H318	Calculation method
Skin Sens. 1	H317	Calculation method
STOT RE 2	H373	Calculation method
Aquatic Chronic 3	H412	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 !