

### Safety Data Sheet dated 01/02/2023, version 1

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

1.1. Product identifier

Mixture identification:

Trade name: Stonefix Injectiehars - Hars Trade code: Stonefix Injectiehars - Hars

UFI code Injectiehars - Hars: K3K8-7A1U-Q105-4E7R

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

Recommended use:

Epoxy resins

1.3. Details of the supplier of the safety data sheet

Company: Stonefix by

Halleboomstraat 1 B3

3020 Herent

1.4. Emergency telephone number

Call the local poisoning emergency number

#### **SECTION 2: Hazards identification**

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP):

- Warning, Skin Irrit. 2, Causes skin irritation.
- Warning, Eye Irrit. 2, Causes serious eye irritation.
- Warning, Skin Sens. 1, May cause an allergic skin reaction.
- Aquatic Chronic 2, Toxic to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

### Hazard pictograms:



Warning

Hazard statements:

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements:

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash ... Thoroughly after handling.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...

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

P391 Collect spillage.

Special Provisions:

None

Contains

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

oxirane, mono[(C12-14-alkyloxy)methyl] derivs.: May produce an allergic reaction.

1,6-bis (2,3-epoxypropoxy) hexane: May produce an allergic reaction.

reaction product: bisphenol- F-(epichlorhydrin)(average molecular weight <= 700): May produce an allergic reaction.



Special provisions according to Annex XVII of REACH and subsequent amendments: None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

## SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Numbe	er	Classification
>= 60% - < 70%	bis-[4-(2,3- epoxipropoxi)phenyl] propane	Index number: CAS: EC: REACH No.:	603-073-00-2 1675-54-3 216-823-5 01- 2119456619 -26-XXXX	<ul> <li>         \$\daggeq 3.3/2\$ Eye Irrit. 2 H319         \$\daggeq 4.1/C2\$ Aquatic Chronic 2 H411         \$\daggeq 3.2/2\$ Skin Irrit. 2 H315         \$\daggeq 3.4.2/1\$ Skin Sens. 1 H317     </li> </ul>
>= 10% - < 12.5%	oxirane, mono[(C12- 14-alkyloxy)methyl] derivs.	Index number: CAS: EC: REACH No.:	68609-97-2 271-846-8	<ul><li>♦ 3.2/2 Skin Irrit. 2 H315</li><li>♦ 3.4.2/1 Skin Sens. 1 H317</li></ul>
>= 10% - < 12.5%	1,6-bis (2,3- epoxypropoxy) hexane	CAS: EC: REACH No.:	933999-84-9 618-939-5 01- 2119463471 -41-xxxx	<ul> <li></li></ul>
>= 5% - < 7%	reaction product: bisphenol- F- (epichlorhydrin) (average molecular weight <= 700)	CAS: EC: REACH No.:	9003-36-5 500-006-8 01- 2119454392 -40-xxxx	<ul> <li></li></ul>
>= 3% - < 5%	benzyl alcohol	Index number: CAS: EC: REACH No.:	603-057-00-5 100-51-6 202-859-9 01- 2119492630 -38-xxxx	<ul> <li>         \$\square\$ 3.1/4/Inhal Acute Tox. 4 H332         \$\square\$ 3.3/2 Eye Irrit. 2 H319         \$\square\$ 3.1/4/Oral Acute Tox. 4 H302     </li> </ul>

#### **SECTION 4: First aid measures**

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must



be rinsed immediately with plenty of running water and possibly with soap.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off safely.

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

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY. In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

None

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

None

### **SECTION 5: Firefighting measures**

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO2).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

### SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

### SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

See also section 8 for recommended protective equipment.

Advice on general occupational hygiene:

Contamined clothing should be changed before entering eating areas.

Do not eat or drink while working.



7.2. Conditions for safe storage, including any incompatibilities

Store at 10-35 °C.

The product may absorb moisture and carbon dioxide if left in open containers.

This may result in some foaming when curing epoxy resins.

Therefore, it should be kept in tightly closed containers when not in use and stored in a dry, cool and well-ventilated place.

Properly protected from moisture, the product has a shelf life of 12 months.

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

Product belongs to category:	Lower-tier threshold (tonnes)	Upper-tier threshold (tonnes)
E2	200	500

#### 7.3. Specific end use(s)

None in particular

### SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No occupational exposure limit available

**DNEL Exposure Limit Values** 

bis-[4-(2,3-epoxipropoxi)phenyl]propane - CAS: 1675-54-3

Worker Professional: 8.3 mg/kg - Exposure: Human Dermal - Frequency: Short Term, systemic effects Worker Professional: 12.3 mg/mg - Exposure: Human Inhalation - Frequency: Short Term, systemic effects

Worker Professional: 12.3 mg/mq - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

reaction product:bisphenol- F-(epichlorhydrin)(average molecular weight <= 700) - CAS: 9003-36-5 Worker Industry: 104.15 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects Worker Industry: 29.39 mg/mg - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

benzyl alcohol - CAS: 100-51-6

Worker Professional: 22 mg/mq - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Worker Professional: 110 mg/mq - Exposure: Human Inhalation - Frequency: Short Term, systemic effects

Worker Professional: 8 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects -Notes: p.c./day

Worker Professional: 8 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects -Notes: p.c./day

Consumer: 20 mg/kg - Exposure: Human Oral - Frequency: Short Term, systemic effects - Notes: p.c./day

### **PNEC Exposure Limit Values**

bis-[4-(2,3-epoxipropoxi)phenyl]propane - CAS: 1675-54-3

Target: Fresh Water - Value: 6 ppm Target: Marine water - Value: 1 ppm

reaction product:bisphenol- F-(epichlorhydrin)(average molecular weight <= 700) - CAS: 9003-36-5 Target: Fresh Water - Value: 0.0003 mg/l

Target: Freshwater sediments - Value: 0.294 mg/kg Target: Marine water sediments - Value: 0.0294 mg/kg

benzyl alcohol - CAS: 100-51-6

Target: Fresh Water - Value: 1 mg/l

Target: Intermittent release - Value: 2.31 mg/l

Target: Marine water - Value: 0.1 mg/l

Target: Freshwater sediments - Value: 5.27 mg/kg



Target: Soil (agricultural) - Value: 0.456 mg/kg

8.2. Exposure controls

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Not needed for normal use.

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

### SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Appearance and colour:	paleyellow liquid		
Odour:	slight		
Odour threshold:	N.A.		
pH:	Not Relevant		
Melting point / freezing point:	N.A.		
Initial boiling point and boiling range:	>200°C		
Flash point:	>100 ° C		
Evaporation rate:	N.A.		
Solid/gas flammability:	N.A.		
Upper/lower flammability or explosive limits:	N.A.		
Vapour pressure:	N.A.		
Vapour density:	N.A.		
Relative density:	1,10-1,15 g/cc		
Solubility in water:	insoluble		
Solubility in oil:			
Partition coefficient (n-octanol/water):	N.A.		
Auto-ignition temperature:	N.A.		
Decomposition temperature:	N.A.		



Viscosity:	N.A.	 	
Explosive properties:	N.A.	 	
Oxidizing properties:	N.A.	 	

#### 9.2. Other information

Properties	Value	Method:	Notes:
Miscibility:	N.A.		
Fat Solubility:	N.A.		
Conductivity:	N.A.		
Substance Groups relevant properties	N.A.		

## SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

It may catch fire on contact with powerful oxidising agents.

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products

None.

### SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the product:

N.Ă

Toxicological information of the main substances found in the product:

bis-[4-(2,3-epoxipropoxi)phenyl]propane - CAS: 1675-54-3

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 11.400 mg/kg

b) skin corrosion/irritation:

Test: Skin Irritant - Route: Skin - Species: Rabbit 1.5-2

Test: Skin Corrosive - Route: Skin - Species: Rabbit 1.0-1.5

oxirane, mono[(C12-14-alkyloxy)methyl] derivs. - CAS: 68609-97-2

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 5000 mg/kg

reaction product:bisphenol- F-(epichlorhydrin)(average molecular weight <= 700) - CAS: 9003-36-5

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 2.000 mg/kg Test: LD50 - Route: Skin - Species: Rabbit > 2.000 mg/kg

b) skin corrosion/irritation:

Test: Skin Irritant - Route: Skin - Species: Rabbit Positive

c) serious eye damage/irritation:

Test: Eye Irritant - Species: Rabbit Positive

e) germ cell mutagenicity:

Test: Genotoxicity Negative

f) carcinogenicity:

Test: Carcinogenicity Negative benzyl alcohol - CAS: 100-51-6



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a) acute toxicity:
                  Test: LD50 - Route: Skin - Species: Rabbit = 2000 mg/kg
                  Test: LC50 - Route: Inhalation Mist - Species: Rat > 4178 mg/m3
                  Test: LD50 - Route: Oral - Species: Rat = 1620 mg/kg
            bis-[4-(2,3-epoxipropoxi)phenyl]propane - CAS: 1675-54-3
                   LD50 (RAT) ORAL: 11 G/KG (11000 MG/KG)
            reaction product:bisphenol- F-(epichlorhydrin)(average molecular weight <= 700) - CAS: 9003-36-5
                  LD50: >23.800 mg/kg (oral rat)
                  LD50: > 2.000 mg/kg (dermal rabbit)
      If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as
      N.A.:
            a) acute toxicity;
            b) skin corrosion/irritation;
            c) serious eye damage/irritation;
            d) respiratory or skin sensitisation;
            e) germ cell mutagenicity;
            f) carcinogenicity;
            g) reproductive toxicity;
            h) STOT-single exposure;
            i) STOT-repeated exposure;
            i) aspiration hazard.
SECTION 12: Ecological information
      12.1. Toxicity
            Adopt good working practices, so that the product is not released into the environment.
            bis-[4-(2,3-epoxipropoxi)phenyl]propane - CAS: 1675-54-3
            a) Aquatic acute toxicity:
                  Endpoint: LC50 - Species: Fish = 1.3 mg/l - Duration h: 96
                  Endpoint: EC50 - Species: Daphnia = 2.1 mg/l - Duration h: 48
                  Endpoint: LC50 - Species: Algae > 11 mg/l - Duration h: 72
            oxirane, mono[(C12-14-alkyloxy)methyl] derivs. - CAS: 68609-97-2
            a) Aquatic acute toxicity:
                   Endpoint: LC50 - Species: Daphnia = 1-10 mg/l - Duration h: 48
            benzyl alcohol - CAS: 100-51-6
            a) Aquatic acute toxicity:
                   Endpoint: LC50 - Species: Fish = 646 mg/l - Duration h: 48
                  Endpoint: LC50 - Species: Fish = 460 mg/l - Duration h: 96
                  Endpoint: EC50 - Species: Daphnia = 230 mg/l - Duration h: 48
      12.2. Persistence and degradability
            None
            N.A.
      12.3. Bioaccumulative potential
            N.A.
      12.4. Mobility in soil
      12.5. Results of PBT and vPvB assessment
            vPvB Substances: None - PBT Substances: None
      12.6. Other adverse effects
            None
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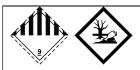
## **SECTION 13: Disposal considerations**

13.1. Waste treatment methods

Recover if possible. In so doing, comply with the local and national regulations currently in force.

### **SECTION 14: Transport information**





14.1. UN number

 ADR-UN Number:
 3082

 IATA-UN Number:
 3082

 IMDG-UN Number:
 3082

14.2. UN proper shipping name

ADR-Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(bis-[4-(2,3-epoxipropoxi)phenyl]propane, reaction product:bisphenol-

F-(epichlorhydrin)(average molecular weight <= 700))

IATA-Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(bis-[4-(2,3-epoxipropoxi)phenyl]propane, reaction product:bisphenol-

F-(epichlorhydrin)(average molecular weight <= 700))

IMDG-Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(bis-[4-(2,3-epoxipropoxi)phenyl]propane, reaction product:bisphenol-

F-(epichlorhydrin)(average molecular weight <= 700))

14.3. Transport hazard class(es)

ADR-Class: 9

ADR - Hazard identification number: 90

IATA-Class: 9
IATA-Label: 9
IMDG-Class: 9

14.4. Packing group

ADR-Packing Group: III IATA-Packing group: III IMDG-Packing group: III

14.5. Environmental hazards

ADR-Enviromental Pollutant: Yes

IMDG-Marine pollutant: Marine Pollutant

Most important toxic component: bis-[4-(2,3-epoxipropoxi)phenyl]propane

14.6. Special precautions for user

ADR-Subsidiary hazards:

ADR-S.P.: 274 335 375 601 ADR-Transport category (Tunnel restriction code): 3 (-)

IATA-Passenger Aircraft: 964
IATA-Subsidiary hazards: IATA-Cargo Aircraft: 964

IATA-S.P.: A97 A158 A197

IATA-ERG: 9L IMDG-EmS: F-A , S-F

IMDG-Subsidiary hazards:

IMDG-Stowage and handling: Category A

IMDG-Segregation:

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

N.A.

## SECTION 15: Regulatory information

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

Dir. 98/24/EC (Risks related to chemical agents at work) Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH) Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) 2015/830

Regulation (EU) n. 286/2011 (ATP 2CLP)

Regulation (EU) n. 618/2012 (ATP 3CLP)

Regulation (EU) n. 487/2013 (ATP 4CLP) Regulation (EU) n. 944/2013 (ATP 5CLP)

Regulation (EU) n. 605/2014 (ATP 6CLP)



Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP)

Regulation (EU) n. 2018/669 (ATP 11 CLP)

Regulation (EU) n. 2018/1480 (ATP 13 CLP)

Regulation (EU) n. 2019/521 (ATP 12 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

Restriction 3

Restrictions related to the substances contained:

No restriction.

Volatile Organic compounds - VOCs = 41.20 g/l 40 gr/Kg

Volatile CMR substances = 0.00 %

Halogenated VOCs which are assigned the risk phrase R40 = 0.00 %

Organic Carbon - C = 0.03

Where applicable, refer to the following regulatory provisions:

Directive 2012/18/EU (Seveso III)

Regulation (EC) nr 648/2004 (detergents).

Dir. 2004/42/EC (VOC directive)

#### 15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

#### **SECTION 16: Other information**

Text of phrases referred to under heading 3:

H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

H332 Harmful if inhaled.

H302 Harmful if swallowed.

Hazard class and hazard category	Code	Description
Acute Tox. 4	3.1/4/Inhal	Acute toxicity (inhalation), Category 4
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
Skin Sens. 1	3.4.2/1	Skin Sensitisation, Category 1
Skin Sens. 1,1A,1B	3.4.2/1-1A-1B	Skin Sensitisation, Category 1,1A,1B
Aquatic Chronic 2	4.1/C2	Chronic (long term) aquatic hazard, category 2
Aquatic Chronic 3	4.1/C3	Chronic (long term) aquatic hazard, category 3

Paragraphs modified from the previous revision:

**SECTION 15: Regulatory information** 

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:



Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	Calculation method
Skin Sens. 1, H317	Calculation method
Aquatic Chronic 2, H411	Calculation method

This document was prepared by a competent person who has received appropriate training. Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of

Dangerous Goods by Road.

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

CAS: Chemical Abstracts Service (division of the American Chemical

Society).

CLP: Classification, Labeling, Packaging.

DNEL: Derived No Effect Level.

EINECS: European Inventory of Existing Commercial Chemical Substances.

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of

Chemicals.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport

Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization"

(ICAO).

IMDG: International Maritime Code for Dangerous Goods. INCI: International Nomenclature of Cosmetic Ingredients.

KSt: Explosion coefficient.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

PNEC: Predicted No Effect Concentration.

RID: Regulation Concerning the International Transport of Dangerous Goods

by Rail.

STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limiting Value.
TWA: Time-weighted average
WGK: German Water Hazard Class.