SAFETY DATA SHEET MiniBarsTM - Basalt Fiber Reinforced Polymer BFRP

Revision date: 19.09.2017

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

1.1 Product identifier

Chemical name Replace MSDS of Version number Brand name MiniBarsTM - Basalt Fiber Reinforced Polymer BFRP 15.09.2015

2.0

2.0

MiniBarsTM

1.2 Relevant identified uses of

the substance or mixture and

uses advised against

Uses of the chemical Uses advised against Basalt Fiber Reinforced, non-metallic arming for concrete.

This product is not recommended for other uses than those specified above.

1.3 Details of the supplier of the

safety data sheet

Company/undertaking

identification

E-mail

Responsible

Author ReforceTech AS

Luftveien 4

3440 Røyken

Norway

Phone: +47 971 70 670 http://www.reforcetech.com reforcetech@reforcetech.com

ReforceTech AS Sensor Chemcontrol AS

Poison Information Centre: +47 22 59 13 00.

1.4 Emergency telephone

number

SECTION 2: HAZARD IDENTIFICATION

2.1 Classification of the

substance or mixture

Classification according to

1272/2008EC

Not a hazardous substance or hazardous mixture according to Regulation (EC) No 1272/2008.

2.2 Label elements

Precautionary statements

Prevention P261 Avoid breathing dust.

2.3 Other hazards The chemical does not come under (not covered by) REACH Annex XIII regulations for PBT or vPvB substances.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Ingredients Note

Identification Classification Weight%

Basalt fibre Z

ca 82

Hardened vinyl ester Z

ca 18

Nuisance dust, total dust Æ

Explanation

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SECTION 3 Cont.: COMPOSITION/INFORMATION ON INGREDIENTS-

Ingredients comments This chemical does not contain any classified substances.

Note Æ: The substance is listed because it has a exposure limit (OEL).

Note Z: Although the component are not classified as dangerous according to Regulation (EC) No

1272/2008, it provides valuable information to the product composition.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid

measures

Inhalation

Skin contact

Eye contact

Ingestion

Medical information

4.2 Most important symptoms

and effects, both acute and

delayed

Symptomatic treatment for inhalation of dust or aerosols. Fresh air, warmth and rest, preferably in a comfortable, half-sitting position. If breathing stops, perform artificial respiration. Keep respiratory tract open.

Rinse thoroughly with running water. Remove contaminated clothing, watches and the like. It is not probable that the product is harmful in contact with skin.

If fibres or dust get into the eye, remove by flushing with water; If not successful, seek medical

No exposure is likely due to the physical condition of the product.

Symptomatic treatment.

Not known

Not known

4.3 Indication of any immediate

medical attention and special

treatment needed

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Extinguishing media which shall

not be used

5.2 Special hazards arising from

the substance or mixture

5.3 Advice for firefighters

Water spray, foam, CO2 or powder.

Avoid using directed water jets during extinguishing work.

May develop harmful combustion products by heating or fire.

Not known

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions,

protective equipment and

emergency procedures

6.2 Environmental precautions

6.3 Methods and material for

containment and cleaning up

6.4 Reference to other sections Wear protective clothing as described in Section 8.2 of the material safety data sheet.

Avoid generation and spreading of dust.

Sweep together and collect.

See section 7 for information on safe handling. See section 8 for information on personal protection equipment. See section 12 for information on ecology. See section 13 for waste disposal.

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SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling Handle in accordance with good hygiene and safety practice. Operating instructions should be followed to ensure safe use and best results.

The product is flammable and should not be exposed to open flames. Keep in original packaging.

7.2 Conditions for safe storage,

including any incompatibilities

7.3 Specific end use(s) Basalt Fiber Reinforced non-metallic arming for concrete.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

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8 hour

Short

Ingredients Einecs nr

CAS nr Note

mg/m3 ppm

Ref.

mg/m3 ppm Year

Nuisance dust, total dust 10 Norsk

21

2017

OAR remarks Norsk = Measures and limit values for acceptable pollutants in the working atmosphere. Obtained from the norwegian regulation "Forskrift om tiltaks- og grenseverdier".

Footnote 21: The threshold value is determined for total dust, which include all dust particles in the air.

8.2 Exposure controls

Exposure controls

Respiration protection Eye protection Hand protection Skin protection Additional information Common sense and safety precautions should always be used when handling chemicals. Ensure that all containers are properly labeled to prevent accidental ingestion or improper use. Ensure good working hygiene. Make use of recommended safety equipment. Provide adequate exhaust ventilation, or ventilation in the workplace. Avoid contact with eyes and skin.

Use P3 filters if there is a lot of fine dust (smoke), or where the impurities are particularly dangerous. Use P2 filters against most types of dust with low toxicity. P1 filter is only to be used if dust is

harmless. Dust filters to be replaced when it becomes difficult to breathe through.

Normally not required but for prolonged exposure is respiratory protection required. The European Committee for Standardisation (CEN) standards EN136, EN140 and EN405 specify respirator masks and EN149 and EN143 specify filter recommendations.

Wear goggles or face shield for protection against dust. Eye protection shall be in accordance to EN 166 standard.

EN 388 - Protective gloves against mechanical risks may be be considered. Latex or vinyl gloves are recommended for prolonged exposure.

Not required under normal use of the product.

It is good industrial hygiene practices to avoid skin contact as possible. Do not wear rings, watches, etc. which are suitable for keeping the product and thereby cause skin reactions. Barrier creams may help to protect exposed skin, but can not substitute for gloves. Remove contaminated clothing to prevent skin contact. After washing the skin apply oily skin cream to replace lost skin oils. Keep good order.

9.1 Information on basic physical

and chemical properties

Form

Colour

Odour Smell limit pH - conc. Melting point

Boiling point Flash point Relative evaporation rate Flammability (solid, gas) Explosion limits

Vapour pressure

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SECTION 9 Cont.: PHYSICAL AND CHEMICAL PROPERTIES-

Vapour density Relative density

Solubility Solubility water Partition coefficient

n-octanol/water

Auto-ignition temp. Decomposition temperature

Viscosity Explosive properties Oxidising properties 9.2 Other information Solid

Black

None

Not known

Not known

1450 °C (Basalt)

Not known

480 °C

Not known

Not known

Not known

Not known

Not known

1.9

Not known

0 % (Non soluble)

Not known

Not known

Not known

Not relevant (solid)

Not known

Not known

Not known

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SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity 10.2 Chemical stability

10.3 Possibility of hazardous

reactions

10.4 Conditions to avoid 10.5 Incompatible materials Not known

Stable under normal conditions.

Not known

Keep away from open flames and all other forms of ignition.

Not known

The product does not decompose if it is used as intended.

10.6 Hazardous decomposition

products

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological

effects

Acute toxicity Skin corrosion/irritation Serious eye damage/ irritation Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity Reproductive toxicity STOT-single exposure STOT-repeated exposure Aspiration hazard Additional information Under normal use, no health effects are anticipated.

Based on available data, the criteria for classification are not fullfilled.

May cause mechanical irritation.

None of the substances listed in section 3 is classified as allergenic.

None of the substances listed in section 3 is classified as mutagenic.

None of the substances listed in section 3 is classified as carcinogenic. Basalt fibers in the product is uniform and does not come under the definition of MMMF (Man Made MineralFibres), and therefore not affected by classification for these (according to the EU Commission Directive 97/69 / EC). Basalt fibers used in the reinforcement have a diameter of more than 3 micrometers and therefore can not enter the lungs. They are therefore not possible carcinogens according to EU Commission EC

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SECTION 11 Cont.: TOXICOLOGICAL INFORMATION

Guideline 1999/45 (EC).

No fibers created during cutting the product can be classified as carcinogens by the criteria of the World Health Organization. Analysis was conducted by "Statens arbeidsmiljøinstitutt" (norwegian national work environment institute) on dust collected on filter in October 2010 in accordance with "Determination of airborne fiber number concentration. A recommended method, by phase contrast optical micro copy (membrane filter method). "World Health Organization, Geneva 1997, 53 pages. None of the substances listed in section 3 is classified as reproduction toxic.

Based on available data, no classification criteria are met.

Based on available data, the criteria for classification are not fullfilled.

Based on available data, no classification criteria are met.

Probable route of exposure: Skin contact.

Inhalation of dust or airborne particles.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity 12.2 Persistence and

degradability

12.3 Bioaccumulative potential 12.4 Mobility in soil

12.5 Results of PBT and vPvB

assessment

12.6 Other adverse effects Mixture with low solubility. No eco-toxic effect known.

The product is not biologically degradable.

No bio-accumulation is indicated. No harmful long-term effects are expected on aquatic organisms.

The product is not soluble in water.

This product does not contain any PBT or vPvB substances.

Not known

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Disposal group EWC code assessed by the end user, if necessary EWC: 16 01 99 wastes not otherwise specified.

EWC code assigned by the user based on the application of the product.

The EWC code are for illustrative purposes only. Always check the waste codes in view of the current state the product is in. The final waste groups and tags must be determined by the user, based on the actual use of the product.

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Contaminated packaging material should be treated equivalent to residual chemicals. Clean packaging material should be subjected to waste management schemes (recovery recycling, reuse) according to local legislation.

Beyond the intended use, do not discharge product into drains, water courses, groundwater or in the environment

SECTION 14: TRANSPORT INFORMATION

14.1 UN number 14.2 UN proper shipping name 14.3 Transport hazard class(es)

ADR/RID class 14.4 Packing group 14.5 Environmental hazards 14.6 Special precautions for user N/A

n/a

Not known

n/a

n/a

n/a

14.7 Transport in bulk according

to Annex II of MARPOL73/78

and the IBC Code

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SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/ legislation specific for the substance or mixture 15.2 Chemical safety assessment

Additional information

Norwegian Regulations: "FOR-2012-06-16-622 Forskrift om klassifisering, merking og emballering av stoffer og stoffblandinger (CLP).".

Commission Regulation (EU) No 453/2010 Annex II (Appendix II - "II").

European Parliament and Council Regulation (EC) 1272/2008.

Regulations regarding OAR values.

Transport of hazardous goods: ADR, RID, IMDG, IATA (2011).

ECHA (European Chemicals Agency) C&L Inventory database.

Norwegian Waste Regulations (miljøverndepartementet): "FOR 2004-06-01 No. 930: Regulations relating to the recycling of waste".

COMMISSION REGULATION (EU) No 944/2015 of 23 Mars 2015 (ATP6).

Ex-ECB databasen (http://esis.jrc.ec.europa.eu/index.php?PGM=cla).

The product contains no classified ingredients, therefore no chemical safety assessment report has been prepared for the substance or mixture

Classification of this product is given on the basis of the available information from the vendor.

SECTION 16: OTHER INFORMATION

Key literature references and sources for data

Material safety data sheet from the supplier.

Abbreviations in the document First released Printed date Additional information n/a - No relevant information.

vPvB - very Persistent and very Bioaccumulative (require special attention under REACH).

PBT - Persistent, Bioaccumulative and Toxic.

EWC - European Waste Catalogue codes.

bw/day - body weight / day

Article - according to REACH Regulation (EC) No. 1907/2006 is defined as an object that is produced in a special shape, surface or design which to a greater extent than its chemical composition determines its function.

15.09.2015

20.09.2017

Revised and quality controlled by: Sensor Chemcontrol AS Storgata 30 3611 Kongsberg Norway Tlf: +47 32 77 06 60

E-mail: helpdesk@sensor.as.

URL: www.sensor.as.

--- SAFETY DATA SHEET conforming to commission regulation (EC) 1272/2008 and (EU) 2015/830 ---This Safety Data Sheet has been compiled using Sensor-chemdoc 8.6g licenced to Sensor Chemcontrol AS