Safety data sheet according to regulation (EC) No 1907/2006 and (EC) No 1272/2008

Trade name:	**Sinafelt**		
Created on:	01.03.2010		
Issue date:	01.06.2015		
Version:	**V2.1**	**Revision datet:**	**20.09.2017**
Replaces former version:	V2.0	File name:	Sinafelt_en_SDB

1.Designation of Material/Preparation/ and Company

Trade-name : Sinafelt

REACH registration number: none

Product Information: Thermal insulation of industrial equipment

Manufacturer/Supplier :

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2. Composition: Information on Constituents

Mixtures:aluminium-silicate fibre. 15 – 60 %

AES wool: CAS 142844-00-6; EC-No.604-314-4; REACH-01-2119458050-50-00001.

Carc. 1B, H350i

3. Potential Hazards

3.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008 The substance is not classified according to the CLP regulation since it is an article.

3.2 Label elements
Labelling according to Regulation (EC) No 1272/2008
P201 – Otain special instructions before use
P261 – Avaoid breathing dust
P280 - Wear respiratory protection
Restricted to professionel users

3.3 Other hazards Results of PBT and vPvB assessment
May cause mechanical irritation to the skin, eyes and respiratory system

4. First-aid Precautions

Inhalation: At times, symptoms of irritation or dryness in throat and nose – anyone inhaling an accumulation of this product must be given acces to fresh air. Free the nose from dust. Drinking copious amounts of water will sooth the irritation.
Skin contact: From time to time irritation of the skin can occur - wash the affected areas of skin with water and mild soap. Do not use any other cleansing agents.

Eye contact: From time to time irritation or inflammation can occur - rinse the eyes with water. Keep an eye glass handy where there is any danger of eye contact.

Swallowing: Can from time to time lead to irritation and functional impairment of the gastro-intestinal tract – drink copious amounts of water. Symptoms of irritation and inflammation are due to possible mechanical friction effects of the substance. Should the symptoms persist, call a doctor.

5. Fire-fighting Precautions

Use an extinguisher appropriate to the environment.

6. Action on accidental Release into the Atmosphere

6.1 Personal precautions	See Point 8 - personal protective clothing for high dust concentrations
6.2. Environmental precautions and decontamination	Collect the product residues mechanically and fill into closed containers; Avoid creating dust. For collecting dust from the product use a vacuum cleaner or clean up with a damp cloth.

7. Handling and Storage

7.1. Handling	Avoid the creation and deposition of dust
7.2. Storage	Store in a dry place. Avoid damage to the packaging.

8. Exposure Control and personal protective Clothing and Equipment

8.1. Additional instructions for the construction of technical plants	Use technical protective measures (e.g. dust exhaustion) to keep dust to a minimum

8.2. Constituents with limits affecting the workplace which require monitoring:

CAS-Nr.	Designation	Measuring Method	Limit
65997-17-3	aluminium silicate fibre	ZH 1/120.31	1.000.000 f/cbm
TRK MAK14464-46-1	general limit for dust cristobalite	gravimetric RDA	6 mg/m_ 0,15 mg/m_gravimetric

--> after use >900°C: gravimetric
10000000 fibres/cbM= old fixed plants up to 31.12.1995
500000 fibres/cbm = all others
RDA= x-ray, diffractometric analysis

8.3 Personal Protective Clothing

Respiratory protection	Where the limits have been exceeded (see Point 8.2.) breathing apparatus with a particle filter corresponding to DIN 1381-P2 must be worn. It is recommended that these masks should be worn also atlower fibre concentrations. up to 5,000,000 fibres/cbm = wear a half-mask with a particle filter corresponding to DIN 3181-P3 up to 25,000,000 fibres/cbm = wear a full mask with a particle filter corresponding to DIN 3191-P3 in excess of 25,000,000 fibres/cbm please refer to the manufacturer.
Skin protection	The use of protective gloves is recommended.
Eye protection	Use protective goggles with side protection. Do not wear contact lenses.
Body protection	Wear loose-fitting clothes. Wear headdress when working overhead.

9. Physical and chemical Properties

9.1. Appearance:	Form : mat Colour : white Smell : odourless
9.2 Data of relevance for safety	Change of state from amorphous to crystalline from approx. 900°C Melting temperature over 1700°C Density at approx. 150 - 200 kg/m³ Solubility: insoluble Vapour pressure: n.a. Explosive limit: n.a.

10. Stability and Reactivity

n.a.

11. Toxicological Data

Acute Toxicity:
Classification values for LD/LD 50 n. a.
Primary irritant effect: causes no irritation of the skin (84/449/EEC Test B4)

Experience with human beings:
Epidemiological investigations of workers in the ceramic fibre industry in Europe and the USA over many years, and which are still in progress, have so far produced the following results:
1. X-ray examinations have revealed no indications of the occurrence of pulmonary fibrosis (interstitial fibrosis).
2. Non-smokers exhibited no indications of pulmonary disorders. Smokers and former smokers, on the other hand, experienced symptoms such as shortage of breath and dry cough.

3. Investigations revealed a statistical trend whereby, depending on the duration of exposure to ceramic fibres, some respiratory function tests showed a measurable decline in pulmonary function. However, this change was not clinically significant and remained within the biological variability of respiratory functional measurement
4. A US study revealed a small number of pleural plaques in a limited number of employees who had been working with ceramic fibres over an extended period of time. A series of occupational and non-occupational causes of pleural plaques exist. It should be mentioned that pleural plaques are neither a precursor of cancer, nor was any link to a measurable impairment of pulmonary function identified.
In recent years a series of studies on rats and hamsters of the overall toxic effects of inhaling ceramic fibres have been conducted. In a chronic nasal inhalation study on rats with a maximum dose of 30 mg/cbm (200f/cbm) lung damage (interstitial fibrosis), lung cancer and pleural plaque (mesothelioma) were observed. In the same study, hamsters also exhibited interstitial fibrosis und mesothelioma, but no lung cancer.

A further study with rats (doses of 3, 6 und 9 g/cbm, corresponding to 25,000,000, 75,000,000 und 115, 000,000 f/cbm) was completed after 29 months. Dosedependent biological effects of ceramic fibres were detected. A rise in the lungcancer rate was not observed at any of the dose-rates. An increased rate of pulmonary fibrosis occurred at concentrations of from 6 and 9 mg/cbm. Pleural fibrosis and a mesothelioma were detected in only a single rat out of 127 from the group 9 mg/cbm. No pulmonary fibrosis was observed in the groups of animals under 9 mg/cbm. In 1998 the WJP-OARC published data on the carcinogenicity of KMF (including ceramic fibres, glass wool, rock wool and slag wool). On the basis of these data, the data available up to that point, ceramic fibres were placed in the group of substances posing a potential threat of cancer to human beings. This classification was based on animal studies as no data had hitherto been available on the effects of ceramic fibres on human beings.

12. Ecological Data

The, mostly mineral, constituents of these products are inert and stable.

13. Instructions for Disposal

These products contain no hazardous substances in the sense of the Dangerous Substances Directive and may be disposed of in an appropriate disposal site in keeping with official and local regulations. Residues and waste not subjected to thermal effects will be taken back by the manufacturer.

EEC-Code for waste glass: 101103

14. Shiping Data

These products do not present any shipping hazard.
Protect products from damp during shipment. Avoid the creation of dust.

15. Regulations

The product is not listed in the Hazardous Substances Directive. However, in accordance with the principle of definition of the Hazardous Substances Directive, Annex 1, we label the product as under:

Symbol Yn slightly toxic

H350i - May cause cancer by inhalation
P201 - Otain special instructions before use
P261 - Avaoid breathing dust
P280 - Wear respiratory protection
TRGS500 Precautions for handling carcinogenic substances
TRGS900 Limits (see Point 8.)

16. Miscellaneous Data

Repeated use of the product at temperatures above 900°C leads (exactly as in the case of many other fireproof substances) to the formation of cristobalite (crystalline SiO2-modification). Prolonged, repeated inhalation of respirable crystalline silica dust can cause delayed damage to the lungs (silicosis). Even though contemporary studies have shown that handling of ceramic fibres is not associated with any great risk to the health, the technical regulation for silicogenic dust should be complied with (TRGA508).

Continual training in the safe handling of ceramic fibre products is an important precautionary measure. We draw your attention in this respect to the instructions for handling ceramic products. For these and for further information on ceramic fibres, such as, for example, the latest DKFG and ECFIA information, please apply to your manufacturer. The data contained in this safety data sheet are based on the present state of knowledge and experience. The safety data sheet describes products from the viewpoint of safety requirements. The data have no significance as assurances regarding their properties.