

MATERIAL SAFETY DATA SHEET

1907/2006/CE (REACH)

1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

Identification of the substance Trade name NEFACIER CF

Identification of the manufacturer name adresse

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Product applications : thermal insulation, sealing and protection

2. HAZARDS IDENTIFICATION

The mineral fibres belong to a group of fibres classified under European regulation N°1272/2008 (CLP), in category 1B, H350i (category 1B : presumed to have carcinogenic potential for humans, classification is largely based on animal evidence).

European regulation N°1272/2008 (CLP), has classified crystalline silicafor the respirable range (less than 10 microns): STOT RE 1, H372.

IARC (International Agency for Research on Cancer) has classified crystalline silica in group 1 for the respirable range (less than 5 microns).

Mild mechanical irritation to skin, eyes and upper respiratory system may result from exposure. Pre-existing conditions : as with any dust, pre-existing upper respiratory and lung diseases may be aggravated.

REACH : Refractory Ceramic Fibers contain in this preparation were registered $\,$ under $N^{\circ}:$ 01-2119458050-50-XXXX $\,$

3. COMPOSITION / INFORMATION ON INGREDIENTS

Composition

Elements	No - CAS	No - EINECS	Classification according to European
			regulation N°1272/2008 (CLP)
Refractory Ceramic Fiber (RCF)	142844-00-6	NA	Category 1B; H350i
N°Index: 650-017-00-8			
Quartz	14808-60-7	238-878-4	-
Quartz $< 10 \mu m$	14808-60-7	238-878-4	STOT RE 1, H372

4. FIRST AID MEASURES

Skin : In case of skin irritation rinse affected areas with water and wash gently.

Eyes : In case of serious eye contact flush abundantly with water ; have eye bath available.

5. FIRE-FIGHTING MEASURES

The material is non-combustible.

Use extinguishing agents suitable for type of surrounding combustible materials.

6. ACCIDENTAL RELEASE MEASURES

Personal protection in case of accidental release or spillage likely to result in an abnormally high dust concentration

Provide the workers with appropriate protective equipment as detailed in section 8. Restrict access to the area to a minimum number of workers. Restore the situation to normal as quickly as possible. Prevent further dust dispersion for example by damping the materials

Methods for cleaning up

Pick up large pieces first and finish with a vacuum cleaner fitted with high efficiency filter. If brushing is used, ensure that the area is wetted down first.

Do not use compressed air for clean up.

For waste disposal refer to section 13.

Environmental protection

Do not allow to be wind blown.

Do not flush spillage to drain and prevent from entering natural water courses. Check for local regulations which rnay apply.

7. HANDLING AND STORAGE

Most industrial handling and cutting applications on the material are likely to produce dust levels well below the Occupational Exposure Limits or ECFIA (European Ceramic Fibre Industry Association) exposure guideline see section 8.

Maintain good housekeeping practices. Clean waste with HEPA vacuum cleaner and place in closed containers. Avoid inhalation of dust.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Techniques to reduce dust exposure to a minimum

Review your RCF application(s) and assess situations with the potential for dust release. Where practical enclose dust sources and provide dust extraction.

Keep the workplace clean.

Use a vacuum cleaner fitted with a HEPA filter ; avoid using brooms and compressed air.

Hygiene standards and exposure limits

Dusts

There is exposure limts for dusts without specify health effect:

Coutry	exposure limits*	Ref
France	10 mg/m^3	total dusts
	5 mg/m^3	breathable dusts
		art. R232.5.5. du code du travail

<u>Quartz</u> :

For breathable dusts of cris	talline silica (range of dust les	s than 5 microns)	
Coutry	exposure limits*	Ref	
France	0.1 mg/m^3	R.4412-149	

Refractory Ceramic Fiber

Hygiene standards and exposure limits may differ from country to country. Check those currently applying in your country and comply with regulations. Examples of exposure limits are given below:

Coutry	exposure limits*	Ref
Germany	0.5 f/ml	TRGS 910
France	0.1 f/ml	Décret n°2007-1539 du 26/10/2007
UK	2.0 f/ml	HSE - EH40 - Maximum Exposure Limit

*8-hr time-weighted average concentrations of airborne respirable ceramic fibres measured by the conventional membrane filter method.

Skin and eye protection

Wear gloves and overalls which are loose fitting at the neck and wrists. Wear goggles or safety glasses with side shields in case of over head working. After handling rinse exposed skin with water. Wash work clothing separately.

Respiratory protection

For dust concentrations significantly below the exposure limit value, (RPE) is not required but FFP2 respirators may be used on a voluntary basis.

For short terrn opérations where excursions above the exposure limit value are less than a factor of ten, use FFP3 respirators.

Information and training of workers

Workers shall be informed on:

the applications involving fibre-containing products;

the potentiel risks to health resulting from exposure to fibrous dust;

the requirements regarding smoking, eating and drinking at the workplace ;

the requirements for protective equipment and clothing.

Workers shall be trained on:

the good working practices to limit dust release ; the proper use of protective equipment.

9.PHYSICAL AND CHEMICAL PROPERTIES

9.1Physical state : solid9.2 Color : white9.3 Odor : none9.4 Specific gravity : 0.99.5 Solubility in water : insoluble

10. STABILITY AND REACTIVITY

Conditions or materials to avoid

Avoid contact with hydrofluoric acid, phosphoric acids and strong alkalis.

Deconposition products

Use of this product at temperature above 900°C may lead to the formation of several crystalline phases. If crystalline silica is present, follow corresponding hygiene standards and national regulations appended.

11.TOXICOLOGICAL INFORMATION

Irritant properties

When tested using approved methods (Directive 67/548/EC, Annex 5. Method B4), this material gives negative results. All man-made mineral fibres, like some natural fibres, can produce a mild irritation resulting in itching or rarely, in some sensitive individuals, in a slight reddening. Unlike other irritant réactions this is not the result of allergy or chemical skin damage but is caused by mechanical effects. **Human data on chronic respiratory health effects**

No known disease associated with exposure to RCF even though these fibres have been used for nearly 40 years. Pulmonary morbidity studies were carried out among the production workers in Europe and the USA.

Inhalation toxicology data in animals

In earlier studies RCF together with other man-made mineral fibres were regarded as inert. In the 70's and 80's tumours were produced in animals after intrapleural or intraperitoneal injections but the several inhalation experiments conducted were inconclusive.

Chronic health effects : IARC (International Agency for Research on Cancer) has classified RCF and mineral fibres in group 2B and crystalline silica in group 1 for the respirable range (less than 5 microns).

12. ECOLOGICAL INFORMATION

This product is an inert material wich remains stable over the time.

13. DISPOSAL CONSIDERATIONS

Waste from these materials is not classified as hazardous waste and may generally be disposed of at a normal tipping site which has been licensed for the disposal of industriel waste.

Check for local regulations which may apply.

14. TRANSPORT INFORMATION

No special precautions required.

15. REGULATORY INFORMATION

Fibre type definition according to European regulation $N^\circ 1272/2008 \; (CLP)$

According to European regulation N°1272/2008 (CLP) these fibres belong to the group of « man-made vitreous (silicate) fibres with random orientation with alkaline oxide and alkali earth oxide (Na2O+K20+CaO+MgO+BaO) content less or equal to 18% by weight ».

Fibre type classification according to European regulation N°1272/2008 (CLP) Category 1B

Protection of workers

Shall be in accordance with several European Directives and their national implementation:

Council Directive 80/1107/EEC as amended by Directive 88/642/EEC « on the protection of workers from the risks related to exposure to chemical, physical and biological agents at work » ;

Council Directive $89/391/EEC \ll$ on the introduction of measures to encourage improvements in the safety and health of workers at work »;

Council Directive 90/394/EEC « on the protection of workers from the risk related to exposure to carcinogens at work »;

Council Directive 98/24/EC «on the protection of workers from the risks related to chemical agents at work».

Comply with hygiene standards and any applicable regulation.

Other possible regulations

Mernber States are in charge of implementing European directives into their own national regulation within a period of time normally given in the directive. Member States may impose more stringent requirements. Please always refer to any applicable regulation.

Labelling

This product is an article so no labelling required

16. OTHER INFORMATION

- STOT RE 1 : Specific target organ toxicity repeated exposure
- H372 : Causes damage to organs through prolonged or repeated exposure
- Category 1B : presumed to have carcinogenic potential for humans, classification is largely based on animal evidence
- H350i : May cause cancer by inhalation

This document completes the technical user manuals, but by no means replaces them. Information given in this document is based on our knowledge of the product concerned on the date when this version of document was drafted. All information is given in good faith.

We attract user attention to risks that might be taken when using a product for other application than the one it was designed for.

This document does not exempt the user from knowing and applying all regulations concerning their activity. The user is entirely responsible for carring out all precautions linked to use of the product. All legal information given in this document has only been mentioned in order to help user fulfil their obligations in terms of using hazardous products.

This list must not be considered to be complete. It does not mean that the user does not have to ensure that any other articles laying down obligations concerning the detention and use of this product exist. The user is entirely responsible for respecting all possible legislation.