



**PBI**

## **MATERIAL SAFETY DATA SHEET**

**( Following 91/155/EEC )**

### **1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY**

1.1 Identification of the substance Trade name	<b>NEFALIT 16</b>
1.2 Identification of the manufacturer name adress	<b>PORTERET BEAULIEU INDUSTRIE 21 310 Bézouotte ( France )</b>
phone ( 33 ) 3 80 10 08 08	fax ( 33 ) 3 80 36 56 87

### **2. COMPOSITION / INFORMATION ON INGREDIENTS**

2.1 Composition :	silica alumina fibres	CAS N° 142844-00-6
	quartz	CAS N° 14808-60-7

### **3. HAZARDS IDENTIFICATION**

The silica alumina fibres belong to a group of fibres classified under Directive 97/69/EC as category 2 carcinogen (« substances which should be regarded as if they are carcinogenic to man »).

Mild mechanical irritation to skin, eyes and upper respiratory system may result from exposure.

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

Pre-existing conditions : as with any dust, pre-existing upper respiratory and lung diseases may be aggravated.

### **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 may 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 of 0,6 F/ml (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

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 (in January 1998) are given below:

Country	Exposure limit*	Source
Germany	0.5 f/ml	TRGS 900
France	0.6 f/ml	Circulaire DRT No 95-4 du 12/01/95
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 term 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**

- 9.1 Physical state : solid
- 9.2 Color : rosa
- 9.3 Odor : none
- 9.4 Specific gravity : 1,0
- 9.5 Solubility in water : insoluble

## **10. STABILITY AND REACTIVITY**

### **Conditions or materials to avoid**

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

### **Decomposition 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.

## **12. ECOLOGICAL INFORMATION**

Nefalit 16 is an inert material which 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 industrial waste.

Check for local regulations which may apply.

## **14. TRANSPORT INFORMATION**

No special precautions required.

## **15. REGULATORY INFORMATION**

### **Fibre type definition according to Directive 97/69/EC**

According to Directive 97/69/EC these fibres belong to the group of « man-made vitreous (silicate) fibres with random orientation with alkaline oxide and alkali earth oxide (Na<sub>2</sub>O+K<sub>2</sub>O+CaO+MgO+BaO) content less or equal to 18% by weight ».

### **Fibre type classification according to Directive 97/69/EC**

Carc. Cat. 2

### **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 « 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**

Member 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**

No label.

<b>16. OTHER INFORMATION</b>
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While the informations and recommendations set forth herein are believed to be accurate, the manufacturer takes no warranty with respect thereto and disclaims all liability from reliance thereon.