

Sillitin / Sillikolloid / Sillikollqir

1. Identification of the product and of the company

Identification of the product:

SILLITIN V 85, N 82, N 85, N 87, Z 86, SILLIKOLLOID P 87, and their puriss grades

A functional filler for elastomers, plastics, paints and varnishes, adhesives, food additives, polishing and protective agents, welding electrodes, as well as in the construction and chemical industry.

Company undertaking identification:

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2. Composition / information on ingredients

CHEMICAL NATURE OF THE PREPARATION

SYNONYMS

SILLITIN and SILLIKOLLOID are natural mixtures of quartz and kaolinite (natural product, EEC-number 310-1 27-6)

COMPONENTS

CAS-NO.	NAME	EC CLASSIFICATION
01 4808-60-7	quartz	no classification
001318-74-7	kaolinite	no classification

3. Hazards identification of the product

SPECIFIC HAZARDS

Prolonged and/or massive inhalation of respirable crystalline silica may cause lung fibrosis, commonly referred to as silicosis. Principal symptoms of silicosis are coughing and breathlessness. Exposure to dust should be monitored and managed.

4. First aid measures

General Advice:

No action to be avoided, nor special instruction for rescuers.

After inhalation:

No special first aid measures, breath fresh air and consult a physician.

After eye contact:
Rinse thoroughly with plenty of water, also under the eyelids.

After swallowing:
Non-toxic

5. Fire fighting measures

Suitable extinguishing equipment:
Does not burn. No hazardous releases in case of fire

Specific Hazards:
Avoid the formation of dust clouds

Special protective equipment for fire fighters:
None

6. Accidental release measures

Personal precautions:
Avoid dust formation.
Personal respirator must be worn in dusty atmospheres.

Environmental precautions:
No special requirement.

Methods of cleaning up / of removing:
Avoid dry sweeping.
Use approved industrial vacuum cleaner for removal.
Keep in suitable and closed containers for disposal.

Other Data:
Where possible recycling is preferred to disposal.

7. Handling and storage

Handling:
Avoid dust formation.
Keep container tightly closed.
Provide appropriate exhaust ventilation at places where dust is formed.
In case of insufficient ventilation, wear suitable respiratory equipment.
Remove and wash soiled clothing.
Your supplier can advise you on safe handling, please contact him.

Storage:

Keep containers closed and store bags such as to prevent any accidental split.
Insure trapping of dust produced during ensilage.

8. Exposure controls / personal protection

EXPOSURE LIMIT VALUES:

Respect regulatory provisions for dust (total and respirable quartz-dust)

CAS-NO.

014808-60-7 - quartz: MEL 0.3 mg/m³ (*) (EH40198 Occupational Exposure Limits 1998)

HSE - Chemical Hazard Alert Notice 35 advise, that employers should aim to control exposures to

0.1 mg/m³ (*) (8-hour TWA) or below, see: www.hse.gov.uk/pubns/chan35.htm

(*) = respirable dust

EXPOSURE CONTROLS:

A. Occupational Exposure Controls:

Provide appropriate exhaust ventilation and filtering at machineries and at places where dust can be generated

- Respiratory protection

In case of exposure to dust over regulatory limits wear a personal respirator in compliance with

national legislation. (make reference to the appropriate CEN standard!)

- Eye protection

Wear safety glasses with side-shields. (make reference to the appropriate CEN standard!)

B. Environmental Exposure Controls

No special requirement. There is no reported ecotoxicity for these naturally occurring substances

9. Physical and chemical properties

Physical state:

Solid, powder

Colour:

White to beige

Odour:

Odourless

pH

7

Flammability:

no

Relative density / 20 °C:

2.6 g/cm³

SiO₂ (%):

60 - 85 (dependent on SILLITIN-type)

Particle size range (µm):

0-25 (dependent on SILLITIN-type)

Grain shape:

Corpuscular / lamellar

Solubility in water / 20 °C:

Insoluble

Solubility in fluorhydric acid:

Yes

Melting point:

Approx. 1600 °C

10. Stability and reactivity

Materials to avoid:

No particular incompatibility

11. Toxicological information

HUMAN EXPERIENCE:

Prolonged and/or massive exposure to respirable quartz-containing dust may cause silicosis, a nodular pulmonary fibrosis caused by the deposition in the lungs of fine respirable particles of crystalline silica.

The IARC (International Agency for Research on Cancer) believes that crystalline silica inhaled from occupational sources can cause lung cancer in human. It however pointed out that not all occupational conditions nor all crystalline silica types were to be incriminated. There is a body of evidence supporting the fact that increased cancer risk would be limited to people already suffering from silicosis. According to current state of the art worker protection against silicosis would be consistently assured by respecting present regulatory occupational limits.

References:

"Silica and Silica-Induced Lung Diseases". V. Castranova, V. Vallyathan & W.E. Wallace (eds.). **1996** CRC Press, pp **418**.

"Silica, some silicates, coal dust and para-aramid fibrils". IARC monograph on the evaluation of carcinogenic risk to human, Volume **68**, **1997**. pp. **41 -242**.

A. Pilkington, W. Maclaren, A. Searl, JMG. Davis, JF. Hurley & CA. Soutar, **1996**. Scientific opinion on the health effects of airborne

crystalline silica. Institute of Occupational Medicine Report **TMI96108**. pp. **63**.

CA.Soutar, A. Robertson, BG. Miller & A. Searl, **1997**. Epidemiological evidence on the carcinogenicity of silica: factors in scientific

judgement, Institute of Occupational Medicine Report **TM197109**. pp. **34**.

Blome H., Bochman F., Mattenklott M., Nies E., Stamm R., Bauer H.-D., Otten H.: Aspekte zur vermuteten krebserzeugenden

Wirkung von Quarz; Gefahrstoffe Reinhaltung der Luft, **1 12-99** Jan./Feb., S. **15**.

Ehnes H.: Quan-Exposition-Berufskrankheit? Das Praventionssystem der Steinbruchs-Berufsgenossenschaft zeigt Erfolge im

Kampf gegen die Silikose; Gefahrstoffe Reinhaltung der Lun, **1 12-99** Jan.IFeb., S. **21**.

12. Ecological information

Ecological adverse effects are not known or expected under normal use.

13. Disposal considerations

Waste from residues / unused products:

Can be landfilled in compliance with local regulations.

The material should be buried to prevent airborne respirable dust being emitted.

Where possible recycling should be preferred to disposal.

Contaminated Packaging:

No specific requirements. Empty packaging may be re-used, recycled or disposed, as appropriate. In all cases dust formation from residues in the packaging should be avoided and suitable worker protection be assured.

14. Transport information

No special precaution required under the regulation on transport of dangerous goods.

15. Regulatory information

Refer to the regulatory exposure limits for workforce enforced in each country. The product has not been classified at the EU level, under the dangerous substances and preparations regulation.

Especially in UK Labelling of silica flour bags in order to warn for the silicotic risk.

Risk phrase: R48120 Harmful - danger of serious damage to health by prolonged exposure through inhalation.

Safety phrase: S22 Do not breathe dust.

S38 In case of insufficient ventilation, wear suitable equipment.

Label see Appendix 1

16. Other information

WARNING

EUROSIL, the EU association of silica producers, recommends to warn users of above mentioned products silicotic risk by labelling bags with suitable information: s.

Appendix 2 „Information and advice“

Backside of our bags.

HSE, CHEMICAL HAZARD ALERT NOTICE 35

Special attention for users in UK, see: www.hse.gov.uk/pubns/chan35.htm

THIRD PARTY MATERIALS

Insofar as materials not manufactured or supplied by HOFFMANN MINERAL are used in conjunction with, or instead of HOFFMANN MINERAL materials, it is the responsibility of the customer itself, to obtain from the manufacturer or supplier, all technical data and other properties relating to these and other materials and to obtain all necessary information relating to them. No liability can be accepted in respect of the use of HOFFMANN MINERAL in conjunction with other materials.

LIABILITY

Such information is to the best of HOFFMANN MINERAL knowledge and belief accurate and reliable as of the date indicated. However, no representation, warranty or guarantee is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy itself as to the suitability and completeness of such information for their own particular use.