1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product information

Commercial Product Name : TONSIL 414FF,LOSE

Company : Süd-Chemie AG
Business Unit Adsorbents and Additives
Ostenriederstrasse 15
85368 Moosburg

Telephone : +498761820
Telefax : +49876182169

Contact Point : BBA-D +49 8761/82-320

Emergency telephone number : +49 (0)613284463 only for working place emergency (contact only in german or english)

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : natural Ca-bentonite, acid-activated

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Symbol(s)</th>
<th>R-phrase(s)</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>free crystalline silica * in fine dust</td>
<td>14808-60-7</td>
<td></td>
<td></td>
<td>&lt; 2,00 %</td>
</tr>
<tr>
<td>fine dust &lt; 7,1 µm</td>
<td></td>
<td></td>
<td></td>
<td>&lt; 5,00 %</td>
</tr>
<tr>
<td>breathable content of crystalline silica * in whole product</td>
<td></td>
<td></td>
<td></td>
<td>&lt; 0,10 %</td>
</tr>
</tbody>
</table>
(* including quartz, cristobalite, tridymite)

3. HAZARDS IDENTIFICATION

Avoid inhalation and/or exceeding of occupational limit value.

4. FIRST AID MEASURES

General advice : none
Eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Skin contact : Wash off with soap and plenty of water.
Inhalation : Move to fresh air.
Ingestion : Rinse mouth.

Notes to physician

Treatment : none

5. FIRE-FIGHTING MEASURES

Specific hazards during fire : none
6. ACCIDENTAL RELEASE MEASURES

Environmental precautions: none.

Methods for cleaning up:
- Take up uncontaminated material and pass on for further processing.
- Take up contaminated material by mechanical means, load into clean containers, and dispose of in accordance with legal regulations.

Additional advice: Avoid dust formation.

7. HANDLING AND STORAGE

Handling:
- Safe handling advice: Avoid formation of dust and aerosols.
- Advice on protection against fire and explosion: No special precautions required.

Storage:
- Requirements for storage areas and containers: Keep container tightly closed and dry.
- Advice on common storage: no restrictions

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Additional technical information on the plant: Local exhaust
Components with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value</th>
<th>Basis / Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUARTZ (alveolar content)</td>
<td>14808-60-7</td>
<td>0,15 mg/m³</td>
<td>Germany TRGS 900 Limit Values TRK Data 02 2000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0,05 mg/m³</td>
<td>ACGIH Threshold Limit Values Note List 1999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0,05 mg/m³</td>
<td>NIOSH Pocket Guide to Chemical Hazards 06 1997</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0,1 mg/m³</td>
<td>OSHA Table Z-1-A 1989</td>
</tr>
<tr>
<td>QUARTZ IN DUST</td>
<td>14808-60-7</td>
<td>0,15 mg/m³</td>
<td>Germany TRGS 900 Limit Values TRK Data 02 2000</td>
</tr>
<tr>
<td></td>
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</tr>
<tr>
<td>limiting value of inert dust</td>
<td></td>
<td>1,5 mg/m³</td>
<td>TRGS900 MAK</td>
</tr>
<tr>
<td>(alveolar content)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>limiting value of inert dust</td>
<td></td>
<td>4 mg/m³</td>
<td>TRGS900 MAK</td>
</tr>
<tr>
<td></td>
<td>(*) including cristobalit and tridymit</td>
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</tr>
</tbody>
</table>

Personal protective equipment

- Respiratory protection: In case of formation of dust: Dust-mask/filter P2
- Hand protection: In case of formation of dust: PVC or other plastic material gloves
- Eye protection: safety glasses
- Skin and body protection: none
- Hygiene measures: Wash off with warm water and soap.
- Protective measures: Prophylactic use of protective ointment (barrier cream) is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

- **Appearance**
  - Form: powder
  - Colour: white to grey
  - Odour: none

- **Other data**
  - Melting point: n.a.
  - Boiling point: n.a.
  - Flash point: n.a.
  - Ignition temperature: n.a.
  - Autoignition temperature: none
  - Upper explosion limit: n.a.
SAFETY DATA SHEET according to EC directive 93/112/EC

TONSIL 414FF, LOSE

Update: 10.09.2001
Print Date: 15.03.2005
Version: 1

Lower explosion limit: n.a.
Vapour pressure: n.a.
Density: n.a.
Bulk density: 608 g/l
Water solubility: insoluble
pH: 5.2 - 7
   at 100 g/l
   Method: Aqueous suspension
Oxidizing properties: Other data: none
Explosive properties: Remarks: none

10. STABILITY AND REACTIVITY

Hazardous reactions (Conditions to avoid): None known

Hazardous reactions (Materials to avoid): None known

Information about decomposition: No decomposition if stored and applied as directed.

11. TOXICOLOGICAL INFORMATION

Acute toxicity
Acute oral toxicity: LD50 rat
   Dose: > 5000 mg/kg
   The product has not been tested in animal experiments. The toxicological data has been taken from products of similar composition.

irritation, Sensitization, Other data Toxicology

Eye irritation: Result: moderately irritating to mucous membranes.
Sensitization: Result: not sensitizing
Repeated dose toxicity: no data available
Human experience: Dust may render the skin dry and chappy. In the event of long-term excess of the TLV value and extended inhalation effect, fine dust containing quartz may cause silicosis. Due to dust raising, light irritation of eyes and/or mucous membranes is possible.
12. ECOLOGICAL INFORMATION

Elimination information (persistence and degradability)
Decomposition : Result: not biodegradable
Product is of mineral origin.

Distribution to environmental compartments
: no data available

Ecotoxicity effects
Further information : no data available

Ecotoxicity

13. DISPOSAL CONSIDERATIONS

Product
: Can be landfilled or incinerated, when in compliance with the Environmental Protection (Duty of Care) Regulations 1991. Contact waste disposal services.

Contaminated packaging
: Can be re-used after emptying and cleaning.

14. TRANSPORT INFORMATION

Land transport
: Not classified as dangerous in the meaning of transport regulations.

Sea transport
: Not classified as dangerous in the meaning of transport regulations.

Air transport
: Not classified as dangerous in the meaning of transport regulations.

15. REGULATORY INFORMATION

General advice
: The product does not need to be labelled in accordance with EC directives or respective national laws.

Hazardous components which must be listed on the label:
preparation
: Not applicable

Other information
: S22 - Do not breathe dust (recommendation)
Follow the usual precautions required when handling chemicals.
16. OTHER INFORMATION

Responsible for SDS: Environmental Protection Contact person: Dep. CEQ Tel.: 08761/82-654

The information presented herein is believed to be accurate, but is not warranted.
It does not represent any assurance of properties of the product.
The specifications are to be drawn from the corresponding leaflet.

A vertical bar (|) in the left margin indicates an amendment from the previous version.

Legend
n.a.: not applicable
n.av.: not available
n.r.: not relevant