Substance key: SCID30000006	Revision Date: 23.05.2014
Version : 1 - 0 / RI	Date of printing : 29.01.2016

1. Identification of the substance/preparation and company

Trade name
Bentonil THR

Material number: 279417

Use of the substance/preparation.

Industry sector :	Industrial Performance Chemicals
Type of use :	Bentonite, acid-leached has a variety of uses. It can be used as an adsorbing agent, filler, flame retardant, pH regulating agent, bleaching agent, corrosion inhibitor, water treatment chemicals and anti-scaling agent.

Identification of the company

Clariant South East Asia Pte. Ltd.

1 International Business Park #08-01-04 The Synergy
609917 Singapore
Telephone no. : +65 6563 0288

Information about the substance/preparation

Business Unit Functional Minerals
Product Stewardship

Emergency telephone number : 00800-5121 5121

2. Composition/information on ingredients

Chemical characterization

Sodium activated bentonite

3. Hazards identification

The product contains less than 1% w/w RCS (respirable crystalline silica) as determined by the SWERF method. The respirable crystalline silica content can be measured using the “Size-Weighted Respirable Fraction – SWERF” method. All details about the SWERF method is available at www.crystallinesilica.eu
Depending on the handling and use (grinding, drying, bagging), airborne respirable dust may be generated. Dust contains respirable crystalline silica. Prolonged and or massive inhalation of respirable crystalline silica dust may cause lung fibrosis, commonly referred to as silicosis. Principal symptoms of silicosis are cough and breathlessness. Occupational exposure to respirable dust should be monitored and controlled. The product should be handled using methods and techniques that minimize or eliminate dust generation.
The substance does not meet the criteria for PBT or vPvB substance.

4. First aid measures

General information

No known delayed effects. Consult a physician for all exposures except for minor instances.

After inhalation
Remove to fresh air immediately. Get medical attention immediately.

After contact with skin
Wash off immediately with soap and plenty of water.

After contact with eyes
Rinse thoroughly with plenty of water, also under the eyelids.
If symptoms persist, call a physician.

After ingestion
Clean mouth with water and drink afterwards plenty of water.

Advice to doctor

Symptoms
There are no acute and delayed symptoms and effects observed.

Hazards
No information available.

Treatment
Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media
The product itself does not burn.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Water spray jet
Dry powder
Foam
Carbon dioxide (CO2)

Extinguishing media that must not be used for safety reasons
no restrictions

Special hazards from the substance itself, its combustion products or from its vapours
The product is not flammable.
Does not sustain combustion.
No hazardous decomposition products are known.

Special protective equipment for firefighting
In the event of fire, wear self-contained breathing apparatus.
Special sliding risk through leaking of spilled product in connection with water.

6. Accidental release measures

Personal precautions

Ensure adequate ventilation.
Avoid dust formation.
Evacuate personnel to safe areas.
Avoid contact with skin, eyes and clothing.
Wear personal protective equipment.
Avoid breathing dust.
Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (dust).
Special sliding risk through leaking of spilled product in connection with water.

Environmental precautions

No special environmental precautions required.

Methods for cleaning up/taking up

Pick up and transfer to properly labelled containers.
If product is released from trucks in roads, place signposts and remove the spill using vacuum cleaning systems.

Additional information

see point 8, 13
Avoid dust formation; avoid dry sweeping
Use vacuum suction unit, or shovel into bags.

7. Handling and storage

Advice on safe handling

Avoid dust formation.
Provide sufficient air exchange and/or exhaust in work rooms.
In case of insufficient ventilation, wear suitable respiratory equipment.
For personal protection see section 8.
Handle and open container with care.
If you require advice on safe handling techniques or specific uses, please contact your supplier or check the further information referred to in section 16.

Requirements for storage rooms and vessels

Minimize airborne dust generation and prevent wind dispersal during loading and unloading.
Keep containers closed and store packaged products so as to prevent accidental bursting.

Advice on storage compatibility

No conditions to be specially mentioned.

Storage stability

Stable under recommended storage conditions.

8. Exposure controls/personal protection

Additional advice on system design

Use ventilation adequate to keep exposures below recommended exposure limits. See the safety datasheet.

Hygiene measures
Wash hands before breaks and at the end of workday.

Respiratory protection :	Local ventilation to keep levels below established threshold values is recommended. In case of prolonged exposure to airborne dust concentrations, a suitable particle filter mask that complies with the requirements of national legislation is recommended, depending on the expected exposure levels.
Hand protection :	Use a high fat protective cream after cleaning skin. Wear suitable gloves.
Eye protection :	Do not wear contact lenses. Safety glasses with side-shields Ensure that eyewash stations and safety showers are close to the workstation location.
Body protection :	Long sleeved clothing

9. Physical and chemical properties

Form :	powder
Colour :	bright to earthy
Odour :	none
Melting point/range :	> 450 °C Method : EU A.1
Boiling point :	not applicable
Flash point :	not applicable
Oxidizing properties :	no oxidizing properties (Based on the chemical structure, the substance does not contain a surplus of oxygen or any structural groups known to be correlated with a tendency to react exothermally with combustible material)
Self-ignition temperature :	Method : 92/69/EEC, A.6. no relative self-ignition temperature below 400 °C
Lower explosion limit :	non explosive (void of any chemical structures commonly associated with explosive properties)
Evaporation rate :	not applicable (solid with a melting point > 450 °C)
Vapour pressure :	not applicable (solid with a melting point > 450 °C)
Density :	1,2 g/cm3
Bulk density :	500 - 1.100 kg/m3 For detail information please refer to our physical & chemical data sheet.
Vapour density in relation to air :	not applicable
Solubility in water :	insoluble

pH value :	9 - 10,5 (20 °C, 100 g/l)
Octanol/water partition coefficient (log Pow) :	not applicable, inorganic
Viscosity (dynamic) :	not applicable

10. Stability and reactivity

Thermal decomposition : No decomposition if used as directed.

Hazardous reactions
None known.

Hazardous decomposition products
Not relevant

Conditions to avoid
Forms slippery/greasy layers with water.

Materials to avoid
inert, not reactive
Avoid storing together with materials that may be affected by dust.

11. Toxicological information

Acute oral toxicity :	LD50 > 2.000 mg/kg Method : estimated from the components The product has not been tested. The information is derived from the properties of the individual components.
Acute inhalation toxicity :	not available
Acute dermal toxicity :	not available
Irritant effect on skin :	not to be classified Method : estimated from the components The product has not been tested. The information is derived from the properties of the individual components.
Irritant effect on eyes :	No eye irritation Method : estimated from the components The product has not been tested. The information is derived from the properties of the individual components.
Sensitization :	no data available, Bentonite is considered not to be a skin sensitizer based on experience in handling and low absorption through the skin.

12. Ecological information

Biodegradability :	The methods for determining biodegradability are not applicable to inorganic substances.

Fish toxicity : Based on data from components, this material is classified as:, Not Harmful (LC50 > 100 mg/L)., The product has not been tested. The information is derived from the properties of the individual components.

Daphnia toxicity : not tested.

Algae toxicity : not tested.

Bioaccumulation: Not relevant for inorganic substances

13. Disposal considerations

Product

Can be disposed of as solid waste in a suitable installation subject to the Environmental Protection (Duty of Care) Regulations.
Avoid dust formation.
Where possible recycling is preferred to disposal or incineration.

Uncleaned packaging

No specific requirements.

14. Transport information

IATA not restricted

IMDG not restricted

15. Regulatory information

Labelling in accordance with EC-Directives

hazard warning labelling not compulsory

16. Other information

Social Dialogue on Respirable Crystalline Silica:

A multi-sectoral social dialogue agreement on Workers Health Protection through the Good Handling and Use of Crystalline Silica and Products Containing it was signed on 25 April 2006. This autonomous agreement, which receives the European Commission's financial support, is based on a Good Practices Guide. The requirements of the Agreement came into force on 25 October 2006. The Agreement was published in the Official Journal of the European Union (2006/C 279/02). The text of the Agreement and its annexes, including the Good Practices Guide, are available from http://www.nepsi.eu and provide useful information and guidance for the handling of products containing respirable crystalline silica. Literature references are available on request from EUROSIL, the European Association of Industrial Silica Producers.
Prolonged and/or massive exposure to respirable crystalline silica-containing dust may cause silicosis, a nodular pulmonary fibrosis caused by deposition in the lungs of fine respirable particles of crystal
In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However it pointed out that

not all industrial circumstances, nor all crystalline silica types, were to be incriminated. (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibres, 1997, Vol. 68, IARC, Lyon, France.)
In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore preventing the onset of silicosis will also reduce the cancer risk…" (SCOEL SUM Doc 94-final, June 2003.
So there is a body of evidence supporting the fact that increased cancer risk would be limited to people already suffering from silicosis. Worker protection against silicosis should be assured by respecting the existing regulatory occupational exposure limits and implementing additional risk management measures where required (see section 16 below).
