SAFETY DATA SHEET
API STANDARD
EVALUATION BASE
CLAY


SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name STANDARD EVALUATION BASE CLAY

REACH registration notes Exempted in accordance with REACH Annex V.7

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Main applications - non-exhaustive list: Ceramics (sanitaryware, floor tiles, wall tiles, roof tiles,

1.3. Details of the supplier of the safety data sheet

Supplier Oilfield Testing & Consulting, LLC

2010 Grandway Dr

Katy, TX. 77449. USA

www.oftesting.com

1.4. Emergency telephone number

Emergency telephone CHEMTREC + 1 (800) 424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

Physical hazards Not Classified

Health hazards STOT RE 2 - H373

Environmental hazards Not Classified

Human health This product contains crystalline silica (fine fraction) as an impurity and therefore is classified as STOT RE 2 according to criteria defined in the Regulation EC 1272/2008 and harmful according to criteria defined in Directive 67/548/EEC due to the potential for generation of airborne respirable crystalline silica. Depending on the type of handling and use (e.g. grinding, drying), airborne respirable crystalline silica may be generated. 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 crystalline silica dust should be monitored and controlled.

Environmental The product is not expected to be hazardous to the environment.
Physicochemical
This product is an inorganic substance and does not meet the criteria for PBT or vPvB in accordance with Annex XIII of REACH. This product should be handled with care to avoid dust generation. The Full Text for all R-Phrases and Hazard Statements is Displayed in Section 16.

2.2 Label elements

Pictogram

<table>
<thead>
<tr>
<th>Signal word</th>
<th>Warning</th>
</tr>
</thead>
</table>

Hazard statements H373 May cause damage to organs (Lungs) through prolonged or repeated exposure if inhaled.

Precautionary statements P260 Do not breathe dust.
P284 [In case of inadequate ventilation] wear respiratory protection.
P314 Get medical advice/attention if you feel unwell.
P501 Dispose of contents/container in accordance with local regulations.

Contains Quartz

2.3 Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

SECTION 3: Composition/information on ingredients

3.1 Substances

Ball Clay 100%

CAS number: — EC number: 310-1

Classification (67/548/EEC or 1999/45/EC)
Quartz 5-10% CAS number: 14808-60-7 EC number: 238-878-4

Classification
STOT RE 1 - H372

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Product name Standard Evaluation Base CLay

REACH registration notes Exempted in accordance with REACH Annex V.7

Composition comments Impurities: Quartz: CAS-No.: 14808-60-7 EC No.: 238-878-4. This product contains between 1 and 10% quartz (fine fraction); quartz (fine fraction) is classified as STOT RE1.

SECTION 4: First aid measures

General information No acute and delayed symptoms and effects are observed.

Inhalation Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if any discomfort continues.

Ingestion Rinse mouth thoroughly with water. Get medical attention if any discomfort continues.

Skin contact Wash skin thoroughly with soap and water. Use suitable lotion to moisturise skin.

Eye contact Do not rub eye. Rinse with copious quantities of water and seek medical attention if irritation persists.

4.2. Most important symptoms and effects, both acute and delayed

General information Get medical attention promptly if symptoms occur after washing.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor No specific recommendations.

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media This product is non-combustible. No specific extinguishing media is needed.

5.2. Special hazards arising from the substance or mixture
Specific hazards Non combustible. No hazardous thermal decomposition.

5.3. Advice for firefighters
Protective actions during firefighting
No specific fire-fighting protection is required. Use an extinguishing agent suitable for the surrounding fire.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid airborne dust generation, wear personal protective equipment in compliance with national legislation.

6.2. Environmental precautions

Environmental precautions Do not discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Avoid dry sweeping and use water spraying or vacuum cleaning systems to prevent airborne dust generation. Wear personal protective equipment in compliance with national legislation.
6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid airborne dust generation. Provide appropriate exhaust ventilation at places where airborne dust is generated. In case of insufficient ventilation, wear suitable respiratory protective equipment. Handle packaged products carefully to prevent accidental bursting. If you require advice on safe handling techniques, please contact your supplier. Do not to eat, drink and smoke in work areas; wash hands after use; remove contaminated clothing and protective equipment before entering eating areas.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in a dry covered area. Minimise airborne dust generation and prevent wind dispersal during loading and unloading. Keep containers closed and store packaged products so as to prevent accidental bursting.

7.3. Specific end use(s)

Usage description If you require advice on specific uses, please contact your supplier.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

Ball Clay
Long-term exposure limit (8-hour TWA): WEL 2 mg/m³ resp.dust
Inorganic dust
Long-term exposure limit (8-hour TWA): WEL 4 mg/m³ respirable dust
Quartz
Long-term exposure limit (8-hour TWA): WEL 0.1 mg/m³
WEL = Workplace Exposure Limit

8.2. Exposure controls

Appropriate engineering controls Minimize airborne dust generation. Use process enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below specified exposure limits. If user operations generate dust, fumes or mist, use ventilation to keep exposure to airborne particles below the exposure limit. Apply organizational measures, e.g. by isolating personnel from dusty areas. Remove and wash soiled clothing.

Eye/face protection Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles or face shield. Contact lenses should not be worn when working with this product.

Hand protection Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. It is recommended that gloves are made of the following material: Polyvinyl chloride (PVC). Rubber (natural, latex).
| Other skin and body protection | No specific requirement. Appropriate protection (e.g. protective clothing, barrier cream) is recommended for workers who suffer from dermatitis or sensitive skin. |
Hygiene measures
When using do not eat, drink or smoke. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Use appropriate skin cream to prevent drying of skin.

Respiratory protection
In case of prolonged exposure to airborne dust concentrations, wear a respiratory protective equipment that complies with the requirements of European or national legislation.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance Powder
Colour Light (or pale), Grey to Buff. Odour Almost odourless.
Relative density 2.6g/cm³
Solubility(ies) Insoluble in water.

9.2. Other information
Other information No information required.

SECTION 10: Stability and reactivity

10.1. Reactivity
Reactivity There are no known reactivity hazards associated with this product.

10.2. Chemical stability
Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions
Possibility of hazardous reactions Not applicable.

10.4. Conditions to avoid
Conditions to avoid No particular incompatibility.

10.5. Incompatible materials
Materials to avoid No specific material or group of materials is likely to react with the product to produce a hazardous situation.

10.6. Hazardous decomposition products
Hazardous decomposition products Does not decompose when used and stored as recommended.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Inhalation Prolonged inhalation of high concentrations may damage respiratory system.
Ingestion No harmful effects expected from quantities likely to be ingested by accident.
<table>
<thead>
<tr>
<th>Skin contact</th>
<th>Prolonged contact may cause dryness of the skin.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye contact</td>
<td>Irritating and may cause redness and pain.</td>
</tr>
<tr>
<td>Acute and chronic health</td>
<td>This product contains quartz (respirable) as an impurity and therefore is classified as STOT RE2 according to criteria defined in the Regulation EC 1272/2008. 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 crystalline silica. In 1997, IARC (the International Agency for Research on Cancer) concluded that</td>
</tr>
</tbody>
</table>
Crystalline silica. 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, SCOE (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..." (SCOE 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).

SECTION 12: Ecological Information

Ecotoxicity

The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

12.1. Toxicity

Acute toxicity - fish LC₅₀, 96 hours: >1000 mg/l, Fish

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: >1000 mg/l, Daphnia magna

Acute toxicity - aquatic plants IC₅₀, 72 hours: >1000 mg/l, Algae

12.2. Persistence and degradability

Persistence and degradability

The product is not biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential

The product does not contain any substances expected to be bioaccumulating.

12.4. Mobility in soil

Mobility

The product is insoluble in water.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment

This substance is not classified as PBT or vPvB according to current EU criteria.
### 12.6. Other adverse effects

Other adverse effects None known.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

**General information**

This mineral can be disposed of as a non toxic/inactive material in approved landfill sites in accordance with local regulations. Dust formation from residues in packaging should be avoided and suitable worker protection assured. Store used packaging in enclosed receptacles. Recycling and disposal of packaging should be carried out in compliance with local regulations. The re-use of packaging is not recommended. Recycling and disposal of packaging should be carried out by an authorised waste management company.

**Disposal methods**

Where possible, recycling is preferable to disposal. Can be disposed of in compliance with local regulations.

### SECTION 14: Transport information

**General**

No special precautions. The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

#### 14.1. UN number

No information required.

#### 14.2. UN proper shipping name

No information required.

#### 14.3. Transport hazard class(es)

No information required.

#### 14.4. Packing group

No information required.

#### 14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

#### 14.6. Special precautions for user

Not applicable.

#### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No information required.

### SECTION 15: Regulatory information

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

**National regulations**

EH40/2005 Workplace exposure limits.

**EU legislation**

Exempted in accordance with REACH Annex V.7

**Guidance**

Safety Data Sheets for Substances and Preparations.
15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

General information

Workers must be informed of the presence of crystalline silica and trained in the proper use and handling of this product as required under applicable regulations. 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 crystalline silica (fine fraction). Literature references are available on request from EUROSIL, the European Association of Industrial Silica Producers. Health & Safety Executive: Detailed reviews of the scientific evidence on the health effects of crystalline silica have been published by HSE (Health and Safety Executive, UK) in the Hazard Assessment Documents EH75/4 (2002) and EH75/5 (2003). The HSE points out on its website that "Workers exposed to fine dust containing quartz are at risk of developing a chronic and possibly severely disabling lung disease known as "silicosis"." In addition to silicosis, there is now evidence that heavy and prolonged workplace exposure to dust containing crystalline silica can lead to an increased risk of lung cancer. The evidence suggests that an increased risk of lung cancer is likely to occur only in those workers who have developed silicosis. Dioxins

The material may contain trace amounts (parts per trillion) of naturally occurring dioxin congeners (PCDD, PCDF) including TCDD. 2,3,7,8. TCDD has been classified as a known human carcinogen by the IARC in Monograph 69 (1997). If this material is used for food, feed, or cosmetic purposes, it is highly recommended to check whether it fulfils the requirements of relevant legislation, in particular with regards to dioxins content.

Revision date 10/12/2017

Revision 1

Hazard statements in full

H372 Causes damage to organs (Lungs) through prolonged or repeated exposure if inhaled.

H373 May cause damage to organs (Lungs) through prolonged or repeated exposure if inhaled.

Such information is to the best of Oilfield Testing’s knowledge and believed 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 himself as to the suitability and completeness of such information for his own particular use.