



# PRODUCT SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006,  
Regulation (EC) No. 1272/2008 and Regulation (EU) 2020/878

|  |   |   |  |  |                                      |   |                             |   |
|--|---|---|--|--|--------------------------------------|---|-----------------------------|---|
| <br><b>KERAMOST</b><br>akciová společnost   | PRODUCT NAME:<br><br><h2 style="text-align: center;">Phonolite</h2> |  |  |  |                                      |   |                             |   |
| <b>Date of publication:</b> December 1, 2008   | <b>Date of printing:</b> December 23, 2022                          | <b>Date of revision:</b> November 21, 2022  |  |  |                                      |   |                             |   |
| <b>SECTION 1: IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY</b>   |   |   |  |  |                                      |   |                             |   |
| <p><b>1.1 Product identifier:</b> Milled phonolite<br/> <b>REACH Registration number:</b> Exempted in accordance with Annex V.7</p> <p><b>1.2 Relevant identified uses of the substance or mixture:</b><br/>         It is applied as fluxing agent in ceramic materials and glass batches for reducing the melting temperatures and shortening of burning time.<br/> <b>Uses advised against:</b><br/>         There are no uses advised against.</p> <p><b>1.3 Details of the supplier of the safety data sheet:</b><br/>         Name: KERAMOST, a.s.<br/>         Address: Žatecká 1899/25, 434 30 Most, CZ<br/>         Identification number: 49901222<br/>         Phone: +420 476 442 511<br/>         Fax: +420 476 704 405<br/>         E-mail: <a href="mailto:reach@keramost.cz">reach@keramost.cz</a></p> <p><b>1.4 Emergency telephone number:</b><br/>         Toxicology information centre (TIC) +420 224 919 293, +420 224 915 402 (non-stop)</p>  |   |   |  |  |                                      |   |                             |   |
| <b>SECTION 2: HAZARDS IDENTIFICATION</b>   |   |   |  |  |                                      |   |                             |   |
| <p><b>2.1 Classification of the substance or mixture:</b><br/>         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.</p> <p>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 <a href="http://www.crystallinesilica.eu">www.crystallinesilica.eu</a>.</p> <table border="0"> <tr> <td><b>Regulation EC 1907/2006 (REACH)</b></td> <td>Not classified – is not hazardous substance.</td> </tr> <tr> <td><b>Regulation EC 1272/2008 (CLP)</b></td> <td>Doesn't meet the criteria for classification.</td> </tr> <tr> <td><b>Directive 67/548/EEC</b></td> <td>It is not classified as a dangerous substance or mixture.</td> </tr> </table> <p><b>2.2 Label elements:</b> Not applicable – not required.</p> <p><b>2.3 Other hazards:</b><br/>         Inorganic material of natural origin. The substance does not meet the criteria for PBT or vPvB substance. No other hazards identified. Bentonite is not known to have an adverse effect on the endocrine system in accordance with the criteria stated within Regulation (EU) 2017/2100 or Regulation (EU) 2018/605.</p> <p><b>The most severe adverse reactions to human health when using the material/preparation:</b><br/>         None were observed.</p> <p><b>The most severe adverse reaction to the environment when using the material/preparation:</b><br/>         None were observed.</p> |   |   | <b>Regulation EC 1907/2006 (REACH)</b> | Not classified – is not hazardous substance. | <b>Regulation EC 1272/2008 (CLP)</b> | Doesn't meet the criteria for classification. | <b>Directive 67/548/EEC</b> | It is not classified as a dangerous substance or mixture. |
| <b>Regulation EC 1907/2006 (REACH)</b>   | Not classified – is not hazardous substance.                        |   |  |  |                                      |   |                             |   |
| <b>Regulation EC 1272/2008 (CLP)</b>   | Doesn't meet the criteria for classification.                       |   |  |  |                                      |   |                             |   |
| <b>Directive 67/548/EEC</b>  | It is not classified as a dangerous substance or mixture.           |   |  |  |                                      |   |                             |   |

## SECTION 3: COMPOSITION / INFORMATION ON ENGREDIENTS

### 3.1 Substances:

Phonolite is a UVCB substance (substances of Unknown or Variable composition, Complex reaction products or Biological materials). Extrusive alkaline rock, which corresponds to nephelinic syenite with phoids, belongs to the group of phonolites. Composition entirely from natural minerals without any additives. The substance / mixture is not classified according to Regulation (EC) 1272/2008. There is no multiplication coefficient (M-factor) or specific concentration limit (SCL).

### 3.2 General component:

Silicates

CAS number:

014808-60-7

EG number (EINECS):

238-878-4

Content (%)

50 - 62 %

### 3.3 Content of hazardous substances:

Not known

## SECTION 4: FIRST AID MEASURES

### 4.1 Description of first aid measures:

#### General advice:

Material hygienically unobjectionable.

#### Following inhalation:

Without internal effects.

#### Following skin contact:

Wash out skin with soap and water.

#### Following eye contact:

Wash out with lukewarm water, should the problems last, seek medical advice.

#### Following ingestion:

Without internal effects.

### 4.2 Most important symptoms and effects, both acute and delayed:

The acute symptoms would pain in the eyes because of dust entry. No delayed effects are anticipated if first aid treatment is applied and is effective.

### 4.3 Indication of any immediate medical attention and special treatment needed:

If health problems occur or in case of doubts, seek medical help and provide information contained in this safety data sheet.

## SECTION 5: FIREFIGHTING MEASURES

### 5.1 Extinguishing media:

**Suitable extinguishing media:** No restrictions. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media:** No restrictions.

### 5.2 Special hazards arising from the substance or mixture:

The material is not flammable and does not support fire. No hazardous thermal decomposition products.

### 5.3 Advice for fire fighters:

Avoid generation of dust. Use breathing apparatus. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation. Keep dust levels to a minimum. Keep unprotected persons away. Avoid inhalation of dust and contact with skin, eyes, and clothing – wear suitable protective equipment (see section 8).

### 6.2 Environmental precaution:

No special requirement.

### 6.3 Methods and material for containment and cleaning up:

Avoid dust formation (avoid dry sweeping). Remove mechanically dust free (use vacuum suction unit, or shovel into bags) and wash down the surface with water.

### 6.4 Reference to other sections:

For more information please check sections 7, 8 and 13 of this safety data sheet.

## SECTION 7: HANDLING AND STORAGE

### 7.1 Precautions for safe handling:

#### Protective measures:

Avoid dust generation and contact with eyes. Provide appropriate exhaust ventilation or wear suitable respiratory protective equipment at places where airborne dust is generated. The composition of the mixture ensures the explosion-proofing and incombustibility.

#### Advice on general occupational hygiene:

Regular cleaning with suitable cleaning devices. Shower and change clothes at end of work shift. Do not wear contaminated clothing at home. No drinking, eating and smoking at the workplace.

### 7.2 Conditions for safe storage, including any incompatibilities:

Minimize airborne dust generation and prevent wind dispersal during loading and unloading. Keep transport containers closed.

### 7.3 Specific end use(s):

Not relevant.

## SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Control parameters:

According to Government regulation No. 361/2007, and Government regulation No. 93/2012.

| Permissible exposure limit (8 hours TWA)        | PELr (respirable fraction)  | PELt (total amount)  |
|---|---|----------------------|
| Other quartzes (with the exception of asbestos) | for Fr ≤ 5 % = 2 mg/m <sup>3</sup><br>for Fr > 5 % = 10 mg/m <sup>3</sup> | 10 mg/m <sup>3</sup> |

#### 8.1.1 Components with occupational exposure limit values:

##### a) Exposure limit values in the air:

The binding European occupational exposure limit for respirable crystalline quartz dust is set at 0.1 mg / m<sup>3</sup> by Directive (EU) 2017/2398. Observe occupational exposure below the limit value for all types of airborne dust (e.g. respirable dust, fine dust, fine quartz dust, fine cristobalite dust) as required by national regulations. Contact the responsible hygienist or local regulatory authority to check the applicable national limits.

| Permissible dust exposure limits (8 hours TWA) in mg/m <sup>3</sup> | Unspecified (inert) dust INHALABLE | Unspecified (inert) dust RESPIRABLE |
|---|------------------------------------|-------------------------------------|
| Austria   | 10                                 | 5                                   |
| Belgium   | 10                                 | 3                                   |
| Bulgaria  |                                    | 4                                   |
| Denmark   | 10                                 | 5                                   |
| Finland   | 10                                 | /                                   |
| France  | 10                                 | 5                                   |
| Germany   | 10                                 | 0,5 *                               |
| Greece  | 10                                 | 5                                   |
| Ireland   | 10                                 | 4                                   |
| Italy   | 10                                 | 3                                   |
| Lithuania   |                                    | 10                                  |
| Luxembourg  | 10                                 | 6                                   |
| Holland   | 10                                 | 5                                   |
| Norway  | 10                                 | 5                                   |
| Poland  | 10                                 | /                                   |
| Portugal  | 10                                 | 5                                   |
| Romania   |                                    | 10                                  |
| Slovakia  | 10                                 |                                     |
| Spain   | 10                                 | 3                                   |
| Sweden  | 5                                  | 2,5                                 |
| Switzerland   |                                    | 6                                   |
| Great Britain   | 10                                 | 4                                   |

\* Defined for a density of 1 g/cm<sup>3</sup>, i.e. for minerals with a common density of 2,5 g/cm<sup>3</sup>, a calculated OEL of 1,25 mg/m<sup>3</sup> applies.

#### Further information on national exposure limit values:

[https://www.nepsi.eu/sites/nepsi.eu/files/content/document/file/oel\\_full\\_table\\_january\\_2021\\_europe.pdf](https://www.nepsi.eu/sites/nepsi.eu/files/content/document/file/oel_full_table_january_2021_europe.pdf)

|  |   |
|--|---|
| <b>b) Biological limit values:</b>   | None  |
| <b>8.1.2 Appropriate technical control:</b>  | None  |
| <b>8.1.3 Exposure limit values and / or biological limit values for contaminated air:</b>  | Not available   |
| <b>8.1.4 Values of DNEL/DMEL and PNEC:</b>   | Not available   |
| <b>8.2 Exposure controls:</b>  |   |
| <b>8.2.1 Appropriate engineering controls:</b>   |   |
| 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, 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 |   |
| <b>8.2.2 Individual protection measures:</b>   |   |
| <b>Eye / face protection:</b>  |   |
| Do not wear contact lenses. If there is an increased risk of eyes contact, use tight fitting goggles with side shields. Ensure accessibility of eyewash equipment and safety showers close to the work place.  |   |
| <b>Skin and hands protection:</b>  |   |
| Wear suitable work clothes with long sleeves, gloves. At the end of each work session wash skin with soap and water. Eventually use a greasy cream – the material dries the skin.  |   |
| <b>Respiratory protection:</b>   |   |
| 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 - Category 2 or 3 (FP2 - FP3). See EN 143:2000 - Respiratory protective equipment.                |   |
| <b>8.2.3 Environmental exposure controls:</b>  |   |
| All ventilation systems should be filtered before discharge to atmosphere. Avoid releasing to the environment. Ensure that spilled material is removed.  |   |
| <b>SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES</b>   |   |
| <b>9.1 Information on basic physical and chemical properties:</b>  |   |
| <b>Appearance (at 20°C):</b>   | Solid   |
| <b>Color:</b>  | Grey  |
| <b>Odour:</b>  | No specific smell   |
| <b>pH value:</b>   | ---   |
| <b>Melting point:</b>  | 1320 °C   |
| <b>Boiling point:</b>  | Not applicable (solid with a melting point > 450 °C)                              |
| <b>Flash point:</b>  | Not applicable (solid with a melting point > 450 °C)                              |
| <b>Evaporation rate:</b>   | Not applicable (solid with a melting point > 450 °C)                              |
| <b>Flammability:</b>   | Non flammable   |
| <b>Auto ignition temperature:</b>  | No relative self-ignition temperature   |
| <b>Explosive limits:</b>   | Non explosive   |
| <b>Oxidising properties:</b>   | No oxidising properties   |
| <b>Vapour pressure:</b>  | Not applicable (solid with a melting point > 450 °C)                              |
| <b>Vapour density:</b>   | Not applicable.   |
| <b>Viscosity:</b>  | Not applicable (solid with a melting point > 450 °C)                              |
| <b>Water solubility:</b>   | Insoluble   |
| <b>SECTION 10: STABILITY AND REACTIVITY</b>  |   |
| <b>10.1 Reactivity:</b>  | Inert and not reactive material.  |
| <b>10.2 Chemical stability:</b>  | The substance is stable under normal conditions.                                  |
| <b>10.3 Possibility of hazardous reactions:</b>  | Not known.  |
| <b>10.4 Conditions to avoid:</b>   | Slippery when wet. Minimise exposure to air and dust generation.                  |
| <b>10.5 Incompatible materials:</b>  | Not reactive. Avoid storing together with materials that may be affected by dust. |
| <b>10.6 Hazardous decomposition products:</b>  | Not known.  |

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects:

- a) **Acute toxicity:**  
Classification criteria are not met according to available information.
- b) **Skin corrosion/irritation:**  
Classification criteria are not met according to available information.
- c) **Serious eye damage / irritation:**  
Classification criteria are not met according to available information.
- d) **Respiratory or skin sensitisation:**  
Classification criteria are not met according to available information.
- e) **Germ cell mutagenicity:**  
Classification criteria are not met according to available information.
- f) **Carcinogenicity:**  
Classification criteria are not met according to available information.
- g) **Toxicity for reproduction:**  
Classification criteria are not met according to available information.
- h) **STOT – single exposure:**  
Classification criteria are not met according to available information.
- i) **STOT – repeated exposure:**  
Classification criteria are not met according to available information.
- j) **Aspiration hazard:**  
Classification criteria are not met according to available information.

## SECTION 12: ECOLOGICAL INFORMATION

- 12.1 **Toxicity:** Not relevant.
- 12.2 **Persistence and degradability:** Not relevant.
- 12.3 **Bioaccumulative potential:** Not relevant.
- 12.4 **Mobility in soil:** Not relevant.
- 12.5 **Results of PBT and vPvB assessment:** Not relevant.
- 12.6 **Endocrine disrupting properties:** Adverse effects are not known.
- 12.7 **Other adverse effects:** Not relevant.

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods:

The residues/unused product can be disposed in landfills following national and local regulations. Dispose in such a way to avoid dust generation. Where possible, recycling should be preferred to disposal.

#### **Substance / preparation disposal:**

Storage category 0.

#### **Contaminated packing disposal:**

Secondary utilization, storing, incineration. In all cases dust formation from residues in the packaging should be avoided and suitable protection be assured.

## SECTION 14: TRANSPORT INFORMATION

The material is not classified as a dangerous substance and no restrictions apply for land/sea/air transportation. Avoid dust spreading.

### 14.1 UN number:

Not relevant.

### 14.2 UN proper shipping name:

Not relevant.

### 14.3 Transport hazard class(es):

ADR, IMDG, ICAO/IATA, RID – Not classified. Phonolite is not hazardous in the sense of transport regulations. Material is not explosive. Transport in usual covered transport means protected against climatic influences.

### 14.4 Packing group:

Not applicable.

### 14.5 Environmental hazards:

Not relevant.

**14.6 Special precautions for user:**

Avoid any release of dust during transportation. Other safety measures according to Section 6 and 8.

**14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code:**

Not regulated.

**SECTION 15: REGULATORY INFORMATION****15.1 Safety, health and environmental regulations / legislation specific for the substance:**

Regulation (EC) No. 1907/2006, Regulation (EC) No. 1272/2008, Regulation (EU) 2020/878, Government regulation (CZ) No. 361/2007, and Government regulation No. 93/2012.

**15.2 Chemical safety assessment:**

Phonolith is exempted from REACH registration in accordance with Annex V.7. Phonolite is not hazardous substance and has no restrictions on use. Composition entirely from natural minerals without any chemical additives

**SECTION 16: OTHER INFORMATION****16.1 Information about revision of safety data sheet:**

Changes in terminology and requirements according to Regulation (EU) 2020/878 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council.

**16.2 Disclaimer:**

The data herein correspond to the present state of knowledge and experience and they are in conformity with valid legal enactments. They are not however comprehensive. When mixing with other products, it is to control whether further health and safety risks can not occur. This safety data sheet does not represent a guarantee of product's properties. It is the responsibility of recipients of this SDS to ensure that the information contained therein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. This version of the SDS supersedes all previous versions.

**16.3 Abbreviations:**

**ADR** – European Agreement concerning the International Carriage of Dangerous Goods by Road

**CLP** – Regulation of European parliament and Council for Classification, Labeling and Packaging of chemicals

**Fr** – Fibrogenetic component contents in respirable fractions

**GHS** – Globally Harmonized System of Classification and Labeling of Chemicals

**IBC** – International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk

**ICAO/IATA** – International Civil Aviation Organization / International Air Transport Association

**IMDG** – International Maritime Dangerous Goods Code

**PBT** – Persistent, Bioaccumulative and Toxic substances

**PEL<sub>t</sub>** – Permissible Exposure Limit, total amount

**PEL<sub>r</sub>** – Permissible Exposure Limit, respirable fraction

**REACH** – EU Regulation about Registration, Evaluation, Authorisation and Restriction of Chemicals

**RID** – Regulations Concerning the International Carriage of Dangerous Goods by Rail

**SWERF** – Size-Weighted Respirable Fraction

**TWA** – Time-Weighted Average

**UN** – Numbers that identify hazardous substances, and dangerous articles in the framework of international transport.

**UVCB** – Substances of Unknown or Variable composition, Complex reaction products or Biological materials

**vPvB** – very Persistent and very Bioaccumulative substances