


<b>P-D Refractories CZ a.s.</b>  Nádražní 218 679 63 Velké Opatovice	<b>MATERIAL SAFETY DATA SHEET (Nr.20b)</b> <b>according to the Regulation of the European Parliament and Council Regulation (EC) no. 1907/2006 (REACH), as amended by Commission Regulation (EU) No. 2015/830</b>
	Date of issue: 02.January 2020 <span style="float:right">Page: 1/6</span> Revision date: has not been revised <span style="float:right">Rev.: 0</span>
	Product name: <b>CERMAL Refractory mastic</b> Product group: RUDOKIT, Quality class: <b>CERMAL</b>

## SECTION 1. SUBSTANCE/MIXTURE AND MANUFACTURER IDENTIFICATION

### 1.1 Product identifier:

**Business name: CERMAL Refractory mastic**

CAS no: n/a (mixture)

EC ( EINECS) no: n/a (mixture)

Index no: n/a (mixture)

REACH registration no: N/A for mixtures.

Other names: None.

### 1.2 Designed applications of substance or mixture and non-recommended applications:

Building industry - bonding chimney liners and acid-resistant fireclays, no further treatment.

Not recommended use: Other than specified by the Manufacturer.

### 1.3 Detailed data of material safety data sheet supplier:

Manufacturer: P-D Refractories CZ a.s.

Address: Nádražní 218, 679 63 Velké Opatovice

Phone: +420 516 493 111, Fax: +420 516 477 338

Email address of competent person responsible for material safety data sheet:

Milan.Mazura@pd-group.com

### 1.4 Emergency phone:

Toxicological information centre +420 224919293, +420 224915402

Na Bojišti 1, 128 08 PRAGUE 2

## SECTION 2. HAZARD IDENTIFICATION

### 2.1 Classification of substance or mixture:

Classification according to European Parliament and Council Regulation (EC) no. 1272/2008 CLP:


Skin Irrit 2: skin corrosion/irritation, Cat. 2

H315 Causes skin irritation.

Eye Irrit. 2: serious eye damage / eye irritation, Cat. 2

H319 Causes serious eye irritation.

### 2.2 Identification elements:


<b>Symbol:</b>	 GHS07
<b>Signal word:</b>	Warning
<b>Contains:</b>	Not applicable.
<b>H-phrases:</b> (hazard statements)	H315 Causes skin irritation. H319 Causes serious eye irritation.
<b>P-phrases:</b> (precautionary statements)	P264 Wash hands with water and soap thoroughly after handling. P280 Wear protective gloves / protective clothing / eye protection / face protection. P301+P330+P331 IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. P303+P361+P353 IF ON SKIN (or with hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. P501 Dispose of content/container by handing it over to a facility authorised to handle wastes.
<b>Additional information on the label:</b>	Not applicable.

### 2.3 Other hazards:

Persistent, bio-accumulative and toxic, highly persistent and highly bio-accumulative substances:

Results of PBT and vPvB:

The product does not contain PBT and vPvB.

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The mixture does not meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation 1907/2006 / EC, the constituents are not listed on the Candidate List of substances of very high concern (SVHC).

### SECTION 3. COMPOSITION/COMPONENT INFORMATION

3.1. Substances:

Not applicable.

3.2. Mixes:

Wet mixture on the basis of silica sands with a chemical bond. It contains 70-80% of silicon dioxide – silica sand (CAS: 14808-60-7, EC: 238-878-4).

Substances dangerous for health or the environment:

Name of component	Concentration % mass	CAS EC Index number Registration number	Classification according to 1272/2008/EC
Quartz (SiO <sub>2</sub> ) (micronized Štřepeč sand)	Rudomal KV (KVLP), KVP: < [25,2 – 27,3]*)	14808-60-7 238-878-4 Not given Not subject to registration	With regard the trade and application form of the product – wet mixture for direct use without any further treatment, no hazardous characteristics apply.
Lithium water glass, contains lithium hydroxide	15	for Li(OH) <sub>2</sub> anhydrous: 1310-66-3 215-183-4 Not given 01-2119560576-31- 0000	For component: Skin Irrit 2: skin corrosion/irritation, Cat. 2 H315 Causes skin irritation. Eye Irrit. 2: serious eye damage / eye irritation, Cat. 2 H319 Causes serious eye irritation.

\*) Expressed as respirable fraction content

Substances with workplace exposure limits:

Does not contain any in the solid state, otherwise see data in 8.1.

### SECTION 4. FIRST AID INSTRUCTIONS

4.1 First aid description:

4.1.1 First aid instructions:

General instructions: Immediate medical attention is required in case of ingestion or contact with eyes. When working observe work hygiene. When working it is necessary to limit direct contact of the skin and mucous membranes of workers to a minimum. In the case of severe symptoms seek medical advice.

Inhalation: There is virtually no risk with regard to the application form. Generally: If inhaled, walk out to the fresh air.

Skin contact: Remove the exposed person away from the source of contamination. Remove contaminated clothing and boots, clean both before further use. Quickly and carefully wash the exposed skin with warm water and soap or other skin cleansing agents and treat with a suitable cream.

Eye contact: Wash out immediately with lukewarm water for at least 15 minutes whilst forcing the eye open. After rinsing use a suitable eye lotion. Wash the eye surroundings with water too. Seek medical attention, continue flushing until treatment is administered.

Swallowing: Never evoke vomiting in unconscious person! Do not serve drinks to unconscious person! Get medical help immediately. Rinse mouth thoroughly with water. Drink

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several glasses of water or milk if immediately available.

- 4.1.2 Additional data: a) Immediate medical attention is required in case of ingestion or contact with eyes  
b) In the case of inhalation moving the exposed person to fresh air is recommended.  
c) Remove contaminated parts of clothing.  
d) Recommended personal protective means to persons providing first aid: See section 8

**4.2 Major acute and delayed symptoms and effects:**

It may cause skin irritation.

Exposed eye irritation.

A burning sensation in the mouth upon ingestion. Gastrointestinal symptoms include nausea, vomiting.

**4.3 Instruction concerning immediate medical attention and special treatment:**

Visit a doctor in the case of nausea.

**SECTION 5. FIRE-FIGHTING MEASURES**

**5.1 Extinguishing agents: Suitable:** Non-flammable. Packaging material used may be flammable (plastic), use appropriate extinguishing agent depending on the surrounding fire.

**Non-suitable:** None are specified.

**5.2 Special hazards following from the substance or mixture:** None are known.

**5.3 Instructions for fire-fighters:** Use equipment depending on the surrounding fire. Non-flammable material.

**SECTION 6. PRECAUTIONS IN CASE OF ACCIDENTAL LEAK**

**6.1 Precautions for personnel protection, protective means and emergency procedures:**

**6.1.1 For staff except for emergency intervention staff**

Restrict unauthorised access to the exposed area until emergency elimination. In the case of large leaks secure the area against unauthorised access.

**6.1.2 For emergency intervention staff:**

Prevent any further spreading of the product and its drying. When handling the leaked product, use personal protective equipment (see Section 8). Other special precautions are not necessary.

**6.2 Environment protection measures:** No acute negative effects on the environment. Prevent further dust spread through the air. Place the devalued product in specified waste collection containers.

**6.3 Methods and materials for leak minimisation and cleaning:** Sweep up the spilled product and place in specified waste collection containers. Prevent excessive dust formation during cleaning. Other special precautions are not necessary.

**6.4 References to other sections:** Personal protective equipment – section 8.

Waste disposal – section 13.

**SECTION 7. STORAGE AND HANDLING**

**7.1 Precautions for safe handling:**

**7.1.1 Particular recommendations:** Use as prescribed by the Manufacturer. Prevent drying out of the product in the packaging or any leaked product. Do not process solidified product in the application form.

**7.1.2 General hygienic instructions for work:** Use personal protective equipment where necessary, especially to protect hands, skin and eyes. Other special precautions are not necessary.

**7.2 Conditions for safe storage:** Store in a dry place. Prevent drying out of the product. Storage limits: None are specified.

**7.3 Specific final application requirements:** No other requirements and instructions except for the data included in section 1.2.

**SECTION 8. EXPOSURE LIMITATIONS/PERSONAL PROTECTIVE EQUIPMENT**

**8.1 Control parameters:** Governed by Government Regulation no 361/2007 Coll., stipulating conditions of occupational health protection, as amended, Annex 3:

No hygienic limits are determined for the product when stored and used in compliance with the Manufacturer's instructions.

**8.2 Exposure limitations:**

**8.2.1 Appropriate technical controls:** Prevent drying out of the product.

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Product group: RUDOKIT,

Quality class: **CERMAL****8.2.2 Individual protective measures including personal protective equipment:****Hygienic conditions:** Prevent contact with eyes and skin.

Observe routine personal hygiene before eating, drinking, toilet use and after work.

**Personal protective equipment:****Eye and face protection:** In case of such an application when there is a risk of contamination (e.g. when working with the product above the face level), use suitable eye protection.**Skin – hand protection:** Protective impermeable working gloves (e.g. leather).**Skin – other protection:** Work clothes and boots.**Respiratory tract protection:** Not required when used as prescribed.**Thermal hazard:** N/A**8.2.3 Limitations of environment exposure:**

Prevent dispersion of the dried product (cutting, grinding, breaking etc.).

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

The information relates to mixture.

**9.1 Information about basic physical and chemical properties**

a) Appearance	Solid state – A powdery mixture with grain size below 0.5 mm, grey colour.
b) Odour	None.
c) Odour threshold	Not specified.
d) pH	11
e) Melting / solidification point	Not specified.
f) Initial boiling point and range	Not specified.
g) Ignition point	Non-flammable.
h) Evaporation speed	Not specified.
i) Flammability (solid subst., gas)	Non-flammable.
j) Upper/lower limit of flammability or explosiveness	Not specified.
k) Vapour pressure	Not specified.
l) Vapour density	Not specified
m) Relative density	2.7 g/cm <sup>3</sup> (bulk density)
n) Solubility	Non-soluble
o) Differentiation coefficient: n-octanol/water	Not specified.
p) Self-ignition temperature	Non-flammable.
q) Decomposition temperature	Not specified.
r) Dynamic viscosity	Not specified.
s) Explosive properties	None.
t) Oxidisation properties	None.

**9.2. Other information**


Solvent content (VOC) 0% (according to definition of the air protection act)

Note:

"Not specified": irrelevant for the product

"None": not available for the product.

**SECTION 10. STABILITY AND REACTIVITY****10.1 Reactivity:** No decomposition under appropriate storage and use conditions.**10.2 Chemical stability:** The product is stable under normal conditions.**10.3 Possible dangerous reactions:** Reaction with strong acids.**10.4 Conditions to be avoided:** None.**10.5 Incompatible materials:** Strong acids.

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10.6 Dangerous decomposition products: None.

## SECTION 11. TOXICOLOGICAL INFORMATION

### 11.1 Information about toxicological effects:

Ways of entry to organism: No acute or chronic effects when entering through common ways of entry.

#### a) Acute toxicity:

- LD<sub>50</sub>, oral, rat (mg.kg<sup>-1</sup>): not specified
- LD<sub>50</sub>, dermal, rat or rabbit (mg.kg<sup>-1</sup>): not specified
- LC<sub>50</sub>, inhalation, rat, for aerosols or particles (mg.kg<sup>-1</sup>): not specified
- LC<sub>50</sub>, inhalation, rat, for gases and vapours (mg.kg<sup>-1</sup>): not specified

Swallowing: Not specified.

#### b) skin corrosion/irritation:

Irritant.

#### c) serious eye damage/irritation:

Causes serious eye irritation.

#### d) Sensitisation of respiratory tract / skin:

Not classified.

#### e) Mutagenicity in embryonic cells:

Not classified.

#### f) Carcinogenicity:

Not classified.

#### g) Toxicity for reproduction:

Not classified.

#### h) Toxicity for specific target organs – single exposition:

Not classified.

#### i) Toxicity for specific target organs – multiple expositions:

Not classified.

#### j) Dangers on inhalation:

Not classified.

Other information: This product contains breathable quartz only bound in the aqueous form. Its hazardous characteristics do not apply to the application form of the product.

## SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity for aqueous organisms: A natural material by origin, no assumed toxic effects on aqueous organisms.

12.2 Persistence and degradability: The product is inert and does not degrade.

12.3 Bioaccumulation potential: Data not available.

12.4 Mobility in soil: Data not available.

12.5. Results of PBT and VPvB assessment: Not required.

12.6. Other unfavourable effects: The product is inert.

## SECTION 13. DISPOSAL INSTRUCTIONS

### 13.1 Methods of waste disposal:

Dumping on specified dumps. Disposal by release to sewerage: Excluded by the product nature.

Waste classification according to Decree 93/2016 Coll. (Waste Catalogue):

10 12 01 Waste ceramic material before thermal processing, cat. O.

### 13.2 Methods of contaminated waste disposal:

Packaging classification:

Packaging with product residue:

15 01 10\* Packaging containing residue of hazardous substances or packaging contaminated with such substances, category N (Included with regard to the possibility of drying of the product residue).

Empty clean packaging:

15 01 02 Plastic packaging, category O.

Includes the adsorption material soaked with the preparation (included with regard to the possibility of drying out and potential dust form):

15 02 02 Absorption agents, filtering materials, cleaning fabric and protective clothing contaminated with hazardous substances, category N.

### 13.3 Waste legislation:

Act no 185/2001 Coll., on Waste

Decree no 93/2016 Coll. (Waste Catalogue)

Decree no 383/2001 Coll. on waste Disposal Details

## SECTION 14. TRANSPORT INFORMATION

### 14.1 UN no:

Not subject to regulations for dangerous object transport.

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14.2 Official (UN) shipping name:

Not subject to regulations for dangerous object transport.

14.3 Class/classes of dangers for transport:

Not subject to regulations for dangerous object transport.

14.4 Package group:

Not subject to regulations for dangerous object transport.

14.5 Environment hazards:

Not subject to regulations for dangerous object transport.

14.6 Special safety precautions for users:

Not subject to regulations for dangerous object transport.

14.7 Bulk transport according to Annex II MARPOL 73/78 and IBC regulation:

Not subject to regulations for dangerous object transport.

**SECTION 15. REGULATORY INFORMATION**

15.1 Regulations concerning safety, health and environment/specific legislation concerning substance or mixture

Act no 254/2001 Coll. on Waters (Water Act), as amended

Act no 185/2001 Coll., on Waste, as amended

Act no 201/2012 Coll., on Air Protection, as amended

Act no 258/2000 Coll., on Public Health Protection, as amended

Act no 350/2011 Coll. of 27 October 2011 on Chemical Substances and Mixtures and on amendment to certain other acts (Chemical Act), as amended

Government Regulation no 361/2007 Coll., as amended, stipulating conditions for occupational health, including PEL and NPK exposure limits (see 8 above).

Regulation (EC) no 1907/2006 on Registration, Evaluation, Authorisation & Restriction of Chemicals and on Establishment of European Chemical Agency, as amended (REACH).

Regulation (EC) no 1272/2008 of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC and on amendment of Regulation (EC) no 907/2006 (CLP)

15.2 Chemical safety assessment

There are no available data for assessment of safety of chemical substances for this material.

**SECTION 16. OTHER INFORMATION**

Data on amendments and revisions:

Rev. no	Date	Amendment description
0	6 Dec 2019	New material safety data sheet

Important literature references and data sources: The data contained in this sheet have been processed on the basis of the Manufacturer's documents, the documents of the supplier of the components of "Střeleč micronized sands" and "Lithium water glass (MP > 3.2)", and on the basis of valid Czech and EU legal regulations.

The list of relevant standard statements of hazards and instructions for safe handling. The full wording of all statements and instructions, the full wording of which is not included in Sections 2 to 15, is stated:

None are included.

Instructions concerning all training courses for staff responsible for human health and environment protection:

Include instructions about working with the product in the occupational safety training system (inaugural training, training in the workplace, repeated training) according to the specific conditions in the workplace.

Recommended limitations for use: Use exclusively for purposes specified by the manufacturer. Prevent drying out of the product outside the applied state.

Other information:

The above data describe exclusively safety requirements for products and are based on current knowledge.

They do not describe product properties in the sense of quality parameters and legislative regulations for warranty compliance.

☞ End of material safety data sheet. ☞