LB MINERALS, s.r.o.

Material Safety Data Sheet in compliance with Regulation (EC) No 1907/2006, Regulation (EC) No 1272/2008
Version 08.0
Revision date: September 2021

SECTION 1: Identification of the Substance / Mixture and the Company / Undertaking

1.1. Product identifier

Substance name: *Kieselguhr*

REACH registration number: *Exempted in accordance with Annex V.7 to Decree (EC) No 1907/2006*

Trade names:

Material	Identification
MF CK04 M	Filter kieselguhr F 4 dried
MJ KRS 10	Homogenized kieselguhr S

Other identification means: diatomaceous earth, diatomite

1.2. Relevant identified uses of the substance or mixture and uses advised against
The substance is used in the manufacture of:

- Filter agent
- Filler
- Excipient not listed anywhere else
- Agent to control pH
- Industrial, professional, and private

1.2.1 Identified specified uses:

Industrial, professional, and consumer use.

1.2.2. Uses advised against:
None

1.3. Details of the supplier of the safety data sheet

Name:	LB MINERALS, s.r.o. www.lb-minerals.cz
Address:	Tovární 431, CZ 330 12 Horní Bříza
Phone No:	+420 378 071 111
Identification number (CRN)/VAT Reg No:	27994929/CZ27994929
E-mail of competent person responsible for SDS in the MA or in the EU:	msds@lb-minerals.cz

1.4. Emergency telephone number:

European Emergency N°:	112	
Emergency telephone number	National Health Service (NHS) 111	
Available outside office hours:	☒ Yes	❑ No

SECTION 2: Hazards Identification

2.1. Classification of the substance
Classification according to Regulation (EC) No 1272/2008:
Not classified as hazardous

2.2. Label elements
None

2.3. Other hazards
This product is an inorganic substance and does not meet the criteria for PBT or vPvB in accordance with Annex XIII. of regulation (EC) No 1907/2006 (REACH).
Depending on the application and processing method, airborne dust containing RCS may be formed.

SECTION 3 : Composition / Information on Ingredients

3.1. Substance

Identification No.	Name of substance
CAS number: 61790-53-2 EC number: 612-383-7	Kieselguhr

Kieselguhr is the UVCB substance, sub-type 4. The product purity is 100 wt%.
This product contains less than 1 wt% of respirable silica (RCS) classified as STOT RE 1.

SECTION 4: First aid measures

4.1. Description of first aid measures
Pay attention to your own safety. No special personal protective equipment is recommended for first aid personnel.

Following inhalation
It is recommended to move the affected persons from the area to fresh air. If the problem persists, seek a medical advice.

Following skin contact
Wash the skin with water and soap and use protective ointment.

Following eye contact
Rinse with a large amount of water and seek medical attention if irritation persists.

Following ingestion
Rinse mouth with a large amount of water. Do not induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed
Acute symptoms may cause eye pain due to dust penetration.
If first aid is provided and is efficient, no delayed effects shall be foreseen.

4.3. Indication of any immediate medical attention and special treatment needed
No need for immediate medical attention; follow the advises given in section 4.1

SECTION 5: Fire-fighting measures

5.1. Extinguishing media
Adapt the fire extinguishing agent to the fire surroundings.

5.2. Special hazards arising from the substance or mixture:
The material is not flammable, and it does not lead to hazardous thermal decomposition products.

5.3. Advice for fire-fighters
Avoid dust formation. Use breathing apparatus. A self-contained breathing apparatus may be required due to other substances but is not necessary due to potential diatomaceous earth exposure. Use the extinguishing fire-extinguishing means appropriate to the local conditions and surrounding environment.
A product on the floor is slippery when moistened and may pose a risk; wear non-slip shoes.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment, and emergency procedures
Avoid the formation of airborne dust, wear personal protective equipment in accordance with local legislation, and see EN 143.

6.2. Environmental precautions
Prevent product from entering drains. Remove spilled material with suction systems.

6.3. Methods and material for containment and cleaning up
Avoid sweeping and ensure disposal without any airborne dust formation. Store it in suitable closed containers. Torn packages must be taped or wrapped in another package. Wear personal protective equipment in accordance with the local regulations.

6.4. Reference to other sections
Refer to sections 8 and 13

SECTION 7: Handling and Storage

7.1. Precautions for safe handling

7.1.1. Protective measures
Keep dust levels to a minimum. Minimize 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 or check the Good Practice Guide referred to in section 16.

7.1.2. Advice on general occupational hygiene
Not drink, eat, and smoke at the workplace. Wash your hands and change contaminated clothing before entering dining room.

7.2. Conditions for safe storage, including any incompatibilities
Minimize airborne dust formation. Keep shipping containers closed and prevent wind blowing during loading and unloading. Store in a dry place protected from moisture. Do not store petroleum substances, oils, or chemicals that have a characteristic odour/smell near the product due to the high diatomaceous earth sorption capacity.
If the product is stored in a dry covered place, it can be stored indefinitely. Its storage temperature is not prescribed. Pallets cannot be stacked.

7.3. Specific end Use(s)
Please contact your supplier for advice on specific applications.

SECTION 8: Exposure controls / Personal protection

8.1. Control parameters
Follow workplace regulatory exposure limits for all types of airborne dust (e.g. total dust, respirable dust, respirable crystalline silica dust).

The occupational exposure limit values (OEL) in the Czech Republic are set by Government Decree No. 361/2007 Coll. on the requirements for health protection at work (measured as an 8-hour time-weighted average):

Name of substance /component	Type	Value ($mg*m^{-3}$)
other quartzes (with the exception of asbestos)	OEL_r * / OEL_t * *SiO_2 contents in respirable fraction ≤ 5% (valid in the CZ)*	2 / 10
	OEL_r ** / OEL_t ** *SiO_2 contents in respirable fractions > 5% (valid in the CZ)*	10 : F_r / 10

F_r – fibrogenetic component contents in respirable fractions %

The permissible exposure limit of the respirable fraction can be specified by the national legislation of the EU Member State.

8.2. Exposure controls

8.2.1. Individual protection measures such as personal protective equipment
Minimize airborne dust formation. Use process covers, local exhaust ventilation, or other technical controls to keep airborne dust concentrations below the specified limits for the work environment. Avoid dry sweeping.

8.2.2. Individual protection measures, such as personal protective equipment

Eye/face protection
Do not wear contact lenses. For powders, tight fitting goggles with side shields, or wide vision full goggles. It is also advisable to have individual pocket eyewash.

Skin/hands protection
For skin, normal work clothes are appropriate. After finishing work, wash the skin with soap and water, or use a greasy cream - the products may dry the skin.

Respiratory protection
In case of prolonged exposure to airborne dust concentrations, wear respiratory protective equipment with the requirements of national legislation is recommended.

Thermal hazards
None.

8.2.3. Environment exposure controls
Avoid any release into the environment. Avoid any leaked product spreading.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Solid
Colour:	Beige, ochre, light grey, grey-green
Odour:	Odourless
Melting point/freezing point:	> 450 °C (EU A1 method)
Boiling point or initial boiling point and boiling range:	Not applicable to solids
Flammability:	Substance is not flammable
Lower and upper explosion limit:	Not applicable to solids
Flash point:	Not applicable to solids
Auto ignition temperature:	Not applicable to solids
Decomposition temperature:	Not applicable to solids
pH (20°C): suspension – 1 part dry matter : 7 parts water	6 – 8
Kinematic viscosity:	Not applicable to solids
Solubility:	Low, max 3.7 mg/l
Partition coefficient: n-octanol/water:	Not applicable to solids
Vapour pressure:	Not applicable to solids
Density and/or relative density:	Not applicable to solids
Relative vapour density:	2,360 kg/m3 (OECD 109 method)
Particle characteristics:	Solid particles, granules, Rest on screen 0.045 mm max. 1%

9.2. Other information:

Bulk density	300 - 450 kg/m^3 dried 400 - 800 kg/m^3 raw

SECTION 10: Stability and reactivity

10.1.	Reactivity	Inert, not reactive
10.2.	Chemical stability	Chemically stable under normal conditions
10.3.	Possibility of hazardous reactions	Products may react violently with hydrofluoric acid and its products.
10.4.	Conditions to avoid	None
10.5.	Incompatible materials	Hydrofluoric acid- products
10.6.	Hazardous decomposition products	None

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Hazard classes:	Outcome of the effect assessments:
Acute toxicity	
Oral	Based on the available data, the classification criteria are not met.
Dermal	Based on the available data, the classification criteria are not met.
Inhalation	Based on the available data, the classification criteria are not met.
Skin corrosion/irritation	Kieselguhr does not irritate the skin.
Serions eye damage/irritation	Kieselguhr does not irritate the eyes.
Respiratory or skin sensitisation	Based on the available data, the classification criteria are not met.
Germ cell mutagenicity	Based on the available data, the classification criteria are not met.

Carcinogenicity	Based on the available data, the classification criteria are not met.
Reproductive toxicity	Based on the available data, the classification criteria are not met.
Specific target organ toxicity - single exposure	Based on the available data, the classification criteria are not met.
Specific target organ toxicity - repeated exposure	STOT RE 1 (if the respirable silica content > 10%) STOT RE 2 (if the content of respirable silica > 1% and < 10%)
Aspiration hazard	Based on the available data, the classification criteria are not met.

11.2. Information on other hazards
None.

SECTION 12: Ecological information

12.1.	Toxicity	No data available
12.2.	Persistence and degradability	No data available
12.3.	Bioaccumulative potential	No data available
12.4.	Mobility in soil	No data available
12.5.	Results of PBT and vPvB assessment	This substance does not meet the criteria for classification as PBT or vPvB.
12.6.	Disrupting properties of the endocrine system	Not listed
12.7.	Other adverse effects	No other adverse effects are identified.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
The substance is not hazardous waste. The diatomaceous earth can be reused if it is not contaminated or otherwise damaged. Waste disposal methods are not applicable here.

Product – unused remains or spilled material
Collect dry unused remains or spilled dry material. The material can be reused, taking into consideration its shelf life and the requirement to prevent dustiness.
In case of any product contamination, liquidate it in line with the waste legislation.
Prevent its penetration into any wastewater system.

Packaging treatment - completely empty, remove in accordance with the applicable legislation.

Waste legislation – Decree 2000/532/EC establishing a list of wastes, as amended.

SECTION 14: Transport information

14.1.	UN number	Not relevant
14.2.	UN proper shipping name	Not relevant
14.3.	Transport hazard class (es)	ADR: Not classified IMDG: Not classified ICAO/IATA: Not classified RID: Not classified
14.4.	Packaging group	Not applicable
14.5.	Environmental hazards	Not relevant
14.6.	Special precautions for users	Not specified
14.7.	Maritime transport in bulk according to IMO instruments	Not relevant

SECTION 15: Regulatory information

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

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals, establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Regulation Council Regulation (EEC) No. 793/93, Commission Regulation (EC) No. 1488/94, Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC, and 2000/21/EC, as amended.

Regulation (EC) No. 1272/2008 of the European Parliament and of the Council 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 amending Regulation (EC) No. 1907/2006, as amended.

15.2. Chemical safety assessment
Was not completed.

SECTION 16: Other information

16.1. Indication of the changes made to the previous version of the MSDS
Version 07.0 - Regulation (EC) No 1272/2008 and Regulation (EC) No 453/2010
Version 08.0 – change of 1.1, 3.1, 9.1, 9.2, 15.1, 16.3, and 16.7, most of the 16 sections were updated in accordance with revised Annex II to the REACH Decree

Reasons to change the safety data sheet version:

COMMISSION REGULATION (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation, and Restriction of Chemicals (REACH).

16.2. Abbreviations and acronyms

OEL	occupational exposure limit
OEL_c	occupational exposure limit for total concentration
OEL_r	occupational exposure limit for respirable dust fraction
PBT	persistent bioaccumulative toxic
REACH	Regulation (ES) No 1907/2006
RCS	respirable crystalline silica
STOT RE	specific target organ toxicity – repeated
vPvB	very persistent/very bioaccumulative
UVCB	Substances of unknown or variable composition

16.3. Relevant H-phrases (number and full text)
EUH066: Repeated exposure may cause skin dryness or cracking
EUH210: Safety data sheet available on request.
EUH212: Caution! Hazardous respirable dust may form during use. Do not inhale dust.

16.4 . Third party material
Insofar as materials not manufactured or supplied by LB MINERALS, s.r.o., are used in conjunction with, or instead of LB MINERALS, s.r.o, materials, it is the responsibility of the customer himself to obtain, from the manufacturer or supplier, all technical data and other properties relating to these and other materials and to obtain all necessary information relating to them. No liability can be accepted in respect of the use of LB MINERALS, s.r.o. Kieselguhr in conjunction with materials from another supplier.

16.5. Liability
Such information is to the best of LB MINERALS, s.r.o.'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.

16.6. Training advice
According to appropriate national legislation. 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.

16.7. Further information
The permissible exposure limit for the total concentration (respirable fraction) of dust (particle size 1–100 µm) is called PEL_c, for the respirable dust fraction PEL_r. The inhalable dust fraction is an aggregate of particles of airborne dust, which can be inhaled through the nose or mouth. Respirable fraction means the mass fraction of inhaled particles (size less than 5 µm) that penetrate the part of the airways where there is no ciliated epithelium and into the alveoli according to EN 1540 Occupational exposure - Terminology.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport, and disposal. The information cannot be

transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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 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, 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.

Disclaimer
This Material Safety Data Sheet (MSDS) has been prepared in accordance with the legal provisions of the REACH Regulation (EC 1907/2006; Article 31 and Annex II), as amended. Its content is intended as a guide for appropriate precautionary measures when handling the material. The responsibility of recipients of this Material Safety Data Sheet is to ensure that the information contained therein is properly read and correctly understood by all personnel who may use or process the product, handle it or come into contact with it in any way. The information and instructions provided in this Material Safety Data Sheet is based on the present state of scientific and technical knowledge at the time of publication. This document does not assume responsibility for the technical design and processing of the material, suitability for specific applications, and does not replace legally valid contractual relationship. This version of the MSDS supersedes all previous versions.

End of the material safety data sheet