HEALTH AND SAFETY INFORMATION SHEET

Prepared in accordance with REACH Regulation EC 1907/2006

Version: 2.00 / EN Issue Date: 01/06/2020

NATURAL PUMICE





SECTION 1: IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Substance Name: Pumice

Chemical name and formula Amorphous Silicon and Aluminium Oxides

Trade Name: Pumice 0/3, 0/8, 2/10, 0/16, 16/40 (designation of pumice in terms of lower sieve (d)

and upper sieve sizes (D) expressed as d/D

CAS Number: 1332-09-8

EINECS Number: -

REACH Registration Number: Exempted in accordance with Annex V.7

1.2 Relevant identified uses of the substance and uses advised against

Identified Uses: Building, Geotechnical, Agricultural and Industrial uses.

Uses Advised Against: No information available

1.3 Details of the supplier of the safety information sheet

Company Name: LAVA Mining and Quarrying Co.

Address: 32, D. Solomou str., GR14123 - Lykovrisi Attica Greece

Telephone Number: +30 210 2898462, +30 210 2898980

Fax Number: +30 210 2817778

 $\hbox{E-mail address of person responsible for the SDS:} \qquad \hbox{eleftherios.christoforakis@lafargeholcim.com}$

1.4 Emergency telephone number

Emergency Telephone Number: +30 2102898462, +30 210 2898382

Hours of Operation: Office Hours

National Emergency Centre: Hours of Operation:

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

2.1.1 According to Regulation (EC) 1272/2008: Not classified as hazardous

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2.2 Label elements

None required

2.3 Other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Composition of the Substance and any impurities relevant for classification and labelling:

Substance	Conc. Range (W/W)	Registration Number	EINECS	CAS	Classification according to Regulation EC 1272/2008	
					Hazard class, Category	Hazard Statement
Pumice	>99%	n.a.		1332-09-8	n.a.	
Quartz not respirable	<0.5%	n.a.	238-878-4	14808-60-7	n.a.	
Aluminium Oxide*	12-15%	n.a.			n.a.	
Silicon Oxide*	>70%	n.a.			n.a.	
Iron Oxide*	1-3%	n.a.			n.a.	
Calcium Oxide*	1-3%	n.a.			n.a.	
Magnesium Oxide*	0 -2%	n.a.			n.a.	
Potassium Oxide*	4-5%	n.a.				n.a.
Sodium Oxide*	3-4%	n.a.			n.a.	

^{*}The free oxides are not present and are fully combined in pumice, which is mainly an amorphous aluminosilicate natural material

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation: Remove person to fresh air. Blow nose, rinse mouth and drink water to clear throat. If irritation persists or later develops contact a specialist of occupational medicine.

Eye Contact: Do not rub eye as additional cornea damage is possible by mechanical stress. Remove any contact lenses and open the eyelid(s) widely to flush eye(s) immediately by thoroughly rinsing with plenty of clean water to remove all particles. If possible, use isotonic water (0,9% NaCl). Beyond flushing do not attempt to remove material from the eyes. If irritation persists or later develops contact a specialist of occupational medicine or an eye specialist.

Skin Contact: Wash with soap and water for at least 15 minutes. Remove contaminated clothes. If irritation persists or later develops contact a specialist of occupational medicine.

Ingestion: If conscious do not induce vomiting, but wash out mouth with water and give plenty of water to drink. Vomiting may occur spontaneously. Get medical attention if any symptoms or discomfort occur. If unconscious get medical attention immediately.

4.2 Most important symptoms and effects, both acute and delayed

Primary route of entry:

Inhalation: Yes Skin: No Ingestion: No ACUTE:

EYES: Direct contact can cause mechanical irritation of eyes. If burning, redness, itching, pain or other symptoms persist or develop, consult physician

SKIN: Direct contact may cause irritation and redness by mechanical abrasion

INHALATION: Dust may irritate the nose, throat and respiratory track by mechanical abrasion. Coughing, sneezing, and shortness of breath may occur. If respiratory symptoms persist, consult physician

INGESTION: Pumice is not toxic. Ingestion of large amounts may cause gastrointestinal irritation and blockage

CHRONIC

INHALATION: Chronic exposure to respirable dust in excess of appropriate exposure limits may cause lung disease.

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4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically

SECTION 5: FIREFIGHTING MEASURES

Pumice is non-combustible and non-explosive and will not facilitate nor support combustion of other materials.

5.1 Extinguishing media

All types of extinguishing media are suitable

5.2 Special hazards arising from the substance or mixture

Pumice poses no fire-related hazards.

5.3 Advice for firefighters

No need for special protective equipment for fire fighters.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Respiratory Protection: Under ordinary conditions no respiratory protection is required. Wear a NIOSH approved respirator when exposed to dust above exposure limits. In closed areas ensure adequate ventilation and avoid generating dust

Eye Protection: Wear glasses or safety goggles to prevent contact with eyes. Wearing contact lenses when using this product under dusty conditions is not recommended.

Skin Protection: Use gloves, shoes and protective clothing to prevent skin contact.

6.2 Environmental precautions

Pumice poses no environmental hazards.

6.3 Methods and material for containment and cleaning up

No special methods neither material needed for containment and cleaning up. Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation.

6.4 Reference to other sections

None

SECTION 7: HANDLING AND STORAGE

General: Avoid accidental release. Use techniques that minimize generating dust. Clean clothes by washing. Do not blow off dust with compressed air. Generally the personal protection and control measures identified in Section 6 should be applied as appropriate

7.1 Precautions for safe handling

Storage Temperature: Unlimited. Storage Pressure: Unlimited.

Empty Containers: Dispose of containers in an approved landfill or incinerator

7.2 Conditions for safe storage, including any incompatibilities

No risk arising from improper storage

7.3 Specific end use(s)

Non applicable

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Name – limit value	Limit value type	Value (as 8 h TWA)	Unit	Legal reference
Pumice,-General dust	OEL alveolar fraction	5	mg/m³	Presidential Decree 77/1993
Pumice,-General dust	OEL inhalable	10	mg/m³	Presidential Decree 77/1993

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8.2 Exposure controls

Engineering Controls

Use exhaust ventilation to maintain dust levels below exposure limits in workplaces with poor ventilation and dusty conditions.

Personal Protection

Respiratory Protection: Under ordinary conditions no respiratory protection is required. Wear a NIOSH approved respirator when exposed to dust above exposure limits.

Eye Protection: Wear glasses or safety goggles to prevent contact with eyes. Wearing contact lenses when using this product under dusty conditions is not recommended.

Skin Protection: Use gloves, shoes and protective clothing to prevent skin contact.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical State: Solid

Appearance: Off white granules of various sizes

 Odour
 Odorless

 pH:
 ~ 8 (in water)

 Water Content:
 16-26% on wet basis

 Melting Point:
 1300-1600 °C

Bulk Density (wet basis): 640-940 kg/m³ depending on pumice size

9.2 Other information

None

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Pumice is stable

10.2 Chemical stability

Pumice is stable.

10.3 Possibility of hazardous reactions

No hazardous reactions.

10.4 Conditions to avoid

None known.

10.5 Incompatible materials

Strong oxidizers (i.e. fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride), contact with which may cause fire and/or explosions. Silica dissolves in hydrofluoric acid producing a corrosive gas-silicon tetrafluoride.

10.6 Hazardous decomposition products

None.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Carcinogenicity Pumice is not listed as a carcinogen by the NTP, OSHA or IARC

Medical conditions aggravated by exposure: Inhaling respirable dust may aggravate pre existing respiratory system and lung diseases such as emphysema or asthma. Exposure may aggravate eye conditions\

Substance	Limit value type	Value (as 8 h TWA)
Pumice -General dust Pumice -General dust	OEL alveolar fraction OEL inhalable	5 mg/m³ 10 mg/m³

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SECTION 12: ECOLOGICAL INFORMATION

Pumice is a naturally occurring material that is not hazardous to the environment.

12.1 Toxicity

None

12.2 Persistence and degradability

None

12.3 Bioaccumulative potential

None

12.4 Mobility in soil

Spillage unlikely to penetrate soil. It is not likely mobile in the environment due its low water solubility. Fine pumice powder might be airborne. No risks caused.

12.5 Results of PBT and vPvB assessment

No PBT nor vPvB assessment needed according to REACH Annex XIII as they do not apply to inorganic substances.

12.6 Other adverse effects

None

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Dispose in landfill in accordance with all applicable regulations. Any disposal practice must be in compliance with local, provincial, state and federal laws and regulations. Contact local environmental agency for specific rules.

SECTION 14: TRANSPORT INFORMATION

Pumice is not covered by the international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID), therefore no classification is required. Open bulk vehicles used to carry the product should be sheeted to avoid the generation of dust..

14.1 UN number

Not relevant

14.2 UN proper shipping name

Not relevant

14.3 Transport hazard class(es)

Not classified

14.4 Packing group

Not applicable

14.5 Environmental hazards

Not relevant

14.6 Special precautions for user

No special precautions

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

Pumice is not enlisted in dangerous chemicals, therefore no special precautions are needed for its transportation

SECTION 15: REGULATORY INFORMATION

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

Natural Pumice is exempted from registration according to Article 2.7.(b) and Annex V of REACH Regulation (EC) 1907/2006, as being a mineral occurring in nature.

15.2 Chemical safety assessment

Exempted from REACH Registration in accordance with Annex V.7. of REACH Regulation (EC) 1907/2006.

SECTION 16: OTHER INFORMATION

16.1 SDS Changes

Version: 1.00 / EN Issue Date: 27/06/2018 Version: 2.00 / EN Issue Date: 01/06/2020

16.2 Annexes to Health and Safety Data Sheet

16.3 Abbreviations and Acronyms

ADR/RID European Agreements on the transport of Dangerous goods by Road/Railway

CAS Chemical Abstracts Service

CLP Classification, labelling and packaging (Regulation (EC) No 1272/2008)
EINECS European INventory of Existing Commercial chemical Substances

IATA International Air Transport Association

IMDG International agreement on the Maritime transport of Dangerous GoodsLC50 Median lethal dose

OEL Occupational Exposure Limit
PBT Persistent, bio-accumulative and toxic

REACH Registration, Evaluation and Authorisation of Chemicals

SDS Safety Data Sheet
TWA Time-Weighted Average

vPvB Very persistent, very bio-accumulative

16.4 Obligation for issuing a Safety Data Sheet

Natural pumice falls in none of the categories stated in Article 31 of REACH regulation, for which an SDS is required. Consequently there is no legal obligation for LAVA Mining and Quarrying Co to issue an SDS. The present Health and Safety Information Sheet is issued to the request of its customers.

DISCLAIMER

This product health and safety data sheet was prepared in compliance with Article 31 and Annex II of Regulation (EC) No 1907/2006 (REACH) as well as their relevant amendments. All information and instructions provided in this data sheet are based on the current state of scientific and technical knowledge at the date indicated on the present data sheet.

The information on this data sheet is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature. Any other use of the product, including the use of the product in combination with any other product or any other process, is the responsibility of the user or of the persons in receipt of this data sheet, as the case may be. It is the responsibility of persons in receipt of this data sheet to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. If the recipient subsequently produces a formulation containing the product, it is the recipient's sole responsibility to ensure the transfer of all relevant information from the present Product Health and Safety Data Sheet to their own product data sheet in compliance with Regulation (EC) No 1907/2006.

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