



Certificate of Analysis

VOLCANICASH

BATCH NO: 4537811
BEST BEFORE END: March 2027

| | | |
|---------------|-----------|----------|
| INCI LISTING: | Pumice | Complies |
| CAS NUMBER: | 1332-09-8 | Complies |
| APPEARANCE: | Powder | Complies |

TYPICAL PROPERTIES

| | | |
|------------------------------------|------------|----------|
| HARDNESS (Mohs): | 5 to 6 | Complies |
| MELTING POINT (°C): | > 1000 | Complies |
| pH VALUE: | 7 to 8 | Complies |
| TRUE DENSITY (g/cm ³): | 2.3 to 2.4 | Complies |

TYPICAL SIEVE ANALYSIS (MICRONS)

| | | |
|-----|----------|----------|
| 88: | 90 to 95 | Complies |
| 74: | 85 to 90 | Complies |
| 44: | 55 to 65 | Complies |
| 20: | 30 to 40 | Complies |



VERSION: 1.2, 12/02/2018

GENETICALLY MODIFIED/ ENGINEERED MATERIALS

VOLCANIC ASH

Whilst the above product supplied by MADAR Corporation is considered GM free, no assurances can be given to this effect due to the possibility of cross-contamination or inadvertent contact with GM materials, which is beyond our control.



Material Safety Data Sheet

DATE OF ISSUE: 23/ 10/2008

SECTION 1: PRODUCT & COMPANY IDENTIFICATION

PRODUCT NAME: **VOLCANIC ASH**
PRODUCT CODE: **RMVOLC**
COMPANY NAME: **MADAR Corporation Limited**
ADDRESS: **19-20 Sandleheath Industrial Estate
Fordingbridge
Hampshire
SP6 1PA**
Approved Sellers: **Mystic Moments, New Directions, World of Moulds**

SECTION 2: COMPOSITION

INCI LISTING: **Pumice**
COUNTRY OF ORIGIN: **Mixed locations**

SECTION 3: HAZARDS IDENTIFICATION

ENVIRONMENTAL HAZARDS: **None known at present.**
HUMAN HEALTH HAZARDS: **Not considered a hazard under normal conditions of use. Although no specific hazard has been identified, prolonged inhalation of dust could possibly cause lung injury and should be treated as a 'Nuisance Particulate'.**

SECTION 4: FIRST AID

INHALATION: **Remove to fresh air. Seek medical advice if any breathing difficulty.**
SKIN CONTACT: **Wash with soap and water and seek medical advice if irritation persists.**
EYE CONTACT: **Wash with copious amounts of water. Seek medical advice if irritation/redness/swelling persists.**
INGESTION: **Seek medical advice in serious cases.**

SECTION 5: FIRE FIGHTING MEASURES

USE: **Standard firefighting media.**
AVOID: **No known firefighting media to be avoided.**
COMMENTS: **None known.**

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: **Wear suitable protective clothing (see section 8).**
ENVIRONMENTAL PRECAUTIONS: **Use appropriate containment to avoid environmental contamination.**
METHODS FOR CLEANING UP: **Sweep up into containers. Dispose of to an authorised waste collection point.**

SECTION 7: HANDLING & STORAGE

HANDLING PRECAUTIONS: **Wear suitable protective clothing. Handle carefully to avoid high concentrations of dust.**
STORAGE CONDITIONS: **Keep container tightly closed. Store in a cool, dry place.**

SECTION 8: EXPOSURE CONTROLS

EXPOSURE CONTROLS: **Avoid excessive exposure to material.**
RESPIRATORY PROTECTION: **Suitable dust mask advised. If insufficient ventilation, suitable respiratory protection must be worn.**
SKIN PROTECTION: **Wear gloves and protective clothing.**
EYE PROTECTION: **Wear protective goggles.**



Material Safety Data Sheet

SECTION 9: PHYSICAL & CHEMICAL PROPERTIES

| | |
|---------------------|---------------------|
| APPEARANCE: | Grey granules |
| ODOUR: | None. |
| pH VALUE: | 7.5 to 8.0 |
| MELTING POINT (°C): | 1500 |
| SOLUBILITY: | Insoluble in water. |

This is not a sales specification.

SECTION 10: STABILITY & REACTIVITY

| | |
|-------------|---------------------------------|
| STABILITY: | Stable under normal conditions. |
| REACTIVITY: | None known. |

SECTION 11: TOXICOLOGICAL INFORMATION

| | |
|--------------------|---|
| TOXICITY COMMENTS: | No detailed toxicological data available. |
|--------------------|---|

SECTION 12: ECOLOGICAL INFORMATION

| | |
|----------------------------|------------------------------------|
| ECOTOXICOLOGICAL COMMENTS: | No known ecotoxicological effects. |
|----------------------------|------------------------------------|

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of in accordance with local regulations.

SECTION 14: TRANSPORT INFORMATION

| | |
|-------------------|-----|
| UN NUMBER: | N/A |
| UN HAZARD CLASS: | N/A |
| UN PACKING GROUP: | N/A |

SECTION 15: REGULATORY INFORMATION

| | |
|-----------------|------|
| HAZARD SYMBOLS: | None |
| RISK PHRASES: | None |
| SAFETY PHRASES: | None |

SECTION 16: ADDITIONAL INFORMATION

| | |
|----------------|------------|
| REVISION DATE: | 23/10/2008 |
|----------------|------------|

THE INFORMATION CONTAINED HEREIN IS PROVIDED IN GOOD FAITH BUT DOES NOT CONSTITUTE A SPECIFICATION. SINCE THE USE OF THIS INFORMATION AND THE CONDITIONS OF USE OF THE PRODUCT ARE NOT WITHIN THE CONTROL OF MADAR CORPORATION LTD IT IS THE USER'S OBLIGATION TO DETERMINE CONDITIONS OF SAFE USE OF THIS PRODUCT.



Product Specification

REVISION: 23/10/2008

VOLCANIC ASH

Pumice is a natural aluminosilicate of volcanic origin. Being inert and extremely brittle with a sharp conchoidal fracture, pumice is recommended as a mild abrasive.

| | | |
|---------------------|---|-----------|
| INCI LISTING | : | Pumice |
| CAS NUMBER | : | 1332-09-8 |
| APPEARANCE | : | Powder |

TYPICAL PROPERTIES

| | | |
|--|---|------------|
| HARDNESS (Mohs) | : | 5 to 6 |
| MELTING POINT (°C) | : | > 1000 |
| pH VALUE | : | 7 to 8 |
| TRUE DENSITY (g/cm³) | : | 2.3 to 2.4 |

| <u>TYPICAL SIEVE ANALYSIS (MICRONS)</u> | | <u>% Passing</u> |
|---|---|------------------|
| 88 | : | 90 to 95 |
| 74 | : | 85 to 90 |
| 44 | : | 55 to 65 |
| 20 | : | 30 to 40 |



Information Sheet

VOLCANIC ASH

Powder, Sand, Granules

Volcanic Ash is a natural aluminosilicate of volcanic origin with a sharp conchoidal fracture that makes it ideally suitable for use as a mild abrasive. It consists largely of silica and aluminium oxide.

Raw material is crushed and sorted into various different sizes, from large pebbles or stones down to very fine powder. As well as being used in cosmetics for exfoliation, different grades of pumice granules are also used in a variety of industrial applications.

The Volcanic Ash sold by MADAR Corporation is typically sourced from the volcanic regions of Europe or North America. In hardness terms, it falls near the middle of the *Mohs* scale with a value of around 5 to 6, which is similar to glass (Talc is 1 and Diamond is 10).

| TYPICAL CHEMICAL ANALYSIS | |
|--|--------------------|
| Chemical | Typical Percentage |
| Silica (SiO ₂) | 70 to 75 |
| Aluminium Oxide (Al ₂ O ₃) | 11 to 16 |
| Sodium Oxide (Na ₂ O) | 3 to 5 |
| Potassium Oxide (K ₂ O) | 3 to 5 |
| Combined Water (H ₂ O+) | 3 to 5 |
| Ferric Oxide (Fe ₂ O ₃) | 0.5 to 1.5 |
| Ferrous Oxide (FeO) | < 1 |
| Magnesium Oxide (MgO) | < 1 |
| Calcium Oxide (CaO) | < 1 |
| Manganese Oxide (MnO) | < 1 |
| Titanium Dioxide (Ti ₂ O) | < 1 |
| Phosphorous Pentoxide (P ₂ O ₅) | < 1 |
| Carbon Dioxide (CO ₂) | < 1 |
| Sulphur Trioxide (SO ₃) | < 1 |

| TYPICAL TRACE METAL ANALYSIS | |
|------------------------------|-------------------------|
| Metal | Typical content (mg/kg) |
| Arsenic (As) | < 1 |
| Cadmium (Cd) | < 1 |
| Chromium (Cr) | < 1 |
| Lead (Pb) | < 1 |