1. Identification of the substance/mixture and of the company/undertaking

- **Product identifier:**
  - **Trade name:** KELARAM
  - **Relevant identified uses of the substance or mixture and uses advised against:**
    - Application of the substance / the preparation: Refractory material.
  - **Details of the supplier of the safety data sheet:**
    - **Manufacturer/Supplier:**
      - Refractarios kelsen, S.A.
      - Belen Industriugunea 1,
      - 20150 Aduna (Gipuzkoa)
      - España
      - Tel: +34 943 696 099
      - kelsen@calcinar.com
    - **Emergency telephone number:** +34 943 696 099
      - **Office Hours:** 8:00-13:00/14:30-17:30

2. Hazards identification

- **Classification of the substance or mixture:**
  - **Classification according to Regulation (EC) No 1272/2008:**
    - STOT SE 3, exposure route: inhalation.
    - Skin irritation, category 2.
    - Eye damage, category 1.
  - **Classification according to Directive 67/548/EEC or Directive 1999/45/EC:**
    - Xi – Irritant.
  - **Classification system:** The classification is according to the latest editions of the EU-lists, and extended by company and literature data.
  - **Label elements:**
    - **Labelling according to Regulation (EC) n° 1272/2008**
      - **Signal Word:** Danger
      - **Pictograms:**

- **Hazard Statements:**
  - H315: Causes skin irritation.
  - H318: Causes serious eye damage.
  - H335: May cause respiratory irritation.

- **Precautionary Statements:**
  - P280: Wear protective gloves/protective clothing/eye protection/face protection.
  - P305+P351+P310: IF IN EYES: Rinse cautiously with water for several minutes. Immediately call a POISON CENTER or doctor/physician.
  - P302+P352: IF ON SKIN: Wash with soap and water.
• P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
• P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
• P501: Dispose of contents/container to local/regional/national/international regulations.

• Classification according to Directive 1999/45/CE:
  • Code letter and hazard designation of product: Xi Irritant.

• Risk phrases:
  • R37: Irritating to respiratory system.
  • R38: Irritating to skin.
  • R41: Risk of serious damage to eyes.

• Safety phrases
  • S25: Avoid contact with eyes.
  • S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
  • S37: Wear suitable gloves.
  • S39: Wear eye/face protection.

3. Composition/information on ingredients

• Chemical characterization: Mixtures.
• Description: Mixture: consisting of the following components.

<table>
<thead>
<tr>
<th>Dangerous components</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium magnesium oxide – CaO.MgO</td>
<td>Eye Dam. 1, H318; Skin Irrit. 2, H315; STOT SE 3, H335</td>
</tr>
</tbody>
</table>

• Additional information: None.
4. First aid measures

- **Description of first aid measures:**
  - **After excessive inhalation:** In case of unconsciousness place patient in a stable laying down side position for transportation.
  - **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
  - **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
  - **After swallowing:** If symptoms persist consult a doctor.

- **Information for doctor:**
  - **Most important symptoms and effects, both acute and delayed:** No further relevant information available.
  - **Indication of any immediate medical attention and special treatment needed:** No further relevant information available.

5. Firefighting measures

- **Suitable extinguishing agents:** CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture:** No further relevant information available.
- **Advice for firefighters**
  - **Protective equipment:** No special measures required.

6. Accidental release measures

- **Personal precautions, protective equipment and emergency procedures:** Not required.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:** Ensure adequate ventilation.
- **Reference to other sections:**
  - See Section 7 for information on safe handling.
  - See Section 8 for information on personal protective equipment.
  - See Section 13 for disposal information.

7. Handling and storage

- **Handling:**
  - **Precautions for safe handling:** No special precautions are necessary if used correctly.
  - **Information about fire - and explosion protection:** No special measures required.

- **Conditions for safe storage, including any incompatibilities:**
  - **Storage:**
    - **Requirements to be met by storerooms and receptacles:** No special requirements.
    - **Information about storage in one common storage facility:** Not required.
    - **Further information about storage conditions:** Keep container tightly sealed.
8. Exposure controls/personal protection

- **Additional information about design of technical facilities**: No further data; see section 7.
- **Control parameters**:

  | Ingredients with limit values that require monitoring at the workplace: |
  |-----------------|------------------|
  | 37247-91-9 Dolomite |
  | VLE=VLA-ED | 3mg/m³ for the respirable powder fraction. |
  | VLE | 10mg/m³ for the inhalable powder fraction. |

- **Additional information**: As a basis for the production of this document, the most current valid lists were used.

- **Exposure controls**:
  - **Personal protective equipment**:
    - **General protective and hygienic measures**: Keep away from food, beverages and pet food. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid all contact with the skin. Avoid contact with the eyes and skin.
  - **Respiratory protection**: In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
  - **Protection of hands**:

    - Protective gloves

    - **Gloves material**: The selection of suitable gloves does not only depend on the material, but also on further marks of quality which may vary from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked before use.

- **Eye protection**:

    - Tightly sealed goggles
### 9. Physical and chemical properties

- **Information on basic physical and chemical properties:**
  - **General information:**
    - **Appearance:**
      - **Form:** Solid.
      - **Colour:** Brown.
    - **Odour:** Characteristic.
    - **Odour threshold:** Not determined.
  - **pH value:** Not applicable.
  - **Change in condition:**
    - **Melting point/Melting range:** Undetermined.
    - **Boiling point/Boiling range:** Undetermined.
  - **Flash point:** Not applicable.
  - **Flammability (solid, gaseous):** Not determined.
  - **Ignition temperature:** Not applicable.
  - **Decomposition temperature:** Not determined.
  - **Self-igniting:** Product is not self-igniting.
  - **Danger of explosion:** Product does not present an explosion hazard.
  - **Explosion limits:**
    - **Lower:** Not determined.
    - **Upper:** Not determined.
  - **Vapour pressure:** Not applicable.
  - **Density:**
    - **Relative density:** Not determined
    - **Vapour density:** Not determined.
    - **Evaporation rate:** Not applicable.
  - **Solubility in / Miscibility with water:** Slightly soluble.
  - **Segregation coefficient (n-octanol/water):** Not determined.
  - **Viscosity:**
    - **Dynamic:** Not applicable.
    - **Cinematic:** Not applicable.
  - **Additional information:** No further relevant information available.
10. Stability and reactivity

- **Reactivity:**
  - **Chemical stability:**
    - **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions:** No dangerous reactions known.
- **Conditions to avoid:** No further relevant information available.
- **Incompatible materials:** No further relevant information available.

11. Toxicological information

- **Information on toxicological effects:**
  - **Acute toxicity:**
    - **Primary irritant effect:**
      - **On the skin:** Irritant to skin and mucous membranes.
      - **On the eyes:** Strong irritant with the danger of severe eye injury.
    - **Sensitization:** No sensitizing effects known.
  - **Additional toxicological information:** The product shows the following hazards according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version: Irritant

12. Ecological information

- **Toxicity:**
  - **Acute toxicity:** No further relevant information available.
  - **Persistence and degradability:** No further relevant information available.
- **Behavior in environmental systems:**
  - **Bioaccumulative potential:** No further relevant information available.
  - **Mobility in soil:** No further relevant information available.
- **Additional ecological information:**
  - **General notes:** Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
  - **PBT:** Not applicable.
  - **vPvB:** Not applicable.
  - **Other adverse effects:** No further relevant information available.
13. Disposal considerations

- **Waste treatment methods:**
  - **Recommendation:**

  ![Icon](image)

  Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- **Uncleaned packaging:**
  - **Recommendation:** Disposal must be made according to official regulations.

14. Transport information

- **UN number:**
  - ADR, ADN, IMDG, IATA: Void

- **Transport hazard class(es):**
  - ADR, ADN, IMDG, IATA:
    - Class: Void

- **Packing group:**
  - ADR, IMDG, IATA: Void

- **Environmental hazards:**
  - Marine pollutant: No

- **Special precautions for user:** Not applicable.

- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:**
  - Not applicable.

- **"UN "Model Regulation":** -

15. Regulatory information

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16. Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Abbreviations and acronyms:**
  - ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road).
  - IATA: International Air Transport Association.