1. Products and Company Identification

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Synonym</th>
<th>Common Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>SinterBall Bauxite</td>
<td>Bauxite (Al₂O₃·xH₂O), Sintered</td>
<td>Bauxite (Al₂O₃·xH₂O), Calcinated</td>
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</tr>
</tbody>
</table>

- Company: Mineração Curimbatá Ltda.
- Address: Rodoviária Poços de Caldas / Caldas, Km 10
- ZIP: 37701-970 - Poços Caldas-MG - Brazil
- Telephone Number: 00 55 35 3729 7600
- Emergency Telephone Number: 00 55 35 3729 7799
- Fax: 00 55 35 37297623
- e-mail: marcia.franco@curimbatab.com.br

2. Hazards Informations

- Most important hazards: This product is not harmful to health
- Effects of Product
  - Adverse effects to human health
  - Inhalation: May cause irritation of the respiratory tract, due to fine particles
  - Ingestion: No adverse effects expected by this route
  - Skin Contact: Prolonged contact of the skin causing friction can cause irritation
  - Eye Contact: May cause irritation, due to fine particles
  - Environmental Effects: No environmental effect was identified related to this product
  - Physical Chemical Hazards: Not identified physical or chemical hazard related to this product
  - Specific Hazards: Not identified any specific danger related to this product
  - Main symptoms: Cough, dyspnoea / shortness of breath, redness / erythema skin and eyes
  - Hazard Classification of Product: This product is not dangerous

- Classification system used: Not applicable
- Signalizing Risk: NFPA – USA
- HMIS Hazard Rating for products:
  - Health: 0 [minimal]
  - Flammability: 0 [minimal]
  - Reactivity: 0 [minimal]

- Symbol of Alert [NFPA 704]

3. Composition / Information on Ingredients

- Product Name: SinterBall Bauxite [All Sizes]
- Common Name: Bauxite (Al₂O₃·xH₂O), Sintered
- Synonym: Bauxite (Al₂O₃·xH₂O), Calcinated

4. First-Aid Measures

- Inhalation: If it occurs, remove to ventilated area if there are many difficulties in breathing, is needed artificial respiration, preferably mouth to mouth if breathing difficulties persist, it will need to administer oxygen, call a doctor
- Skin Contact: Wash with plenty of water, if irritation persists, call your doctor
- Eye Contact: Flush eyes with plenty of water if irritation progress, call the doctor
- Ingestion: If it occurs, seek medical information
- Actions to avoid: Not Applicable
- Protection for the provider of aid: If there is dust generation, use dust mask and safety glasses
- Notes to Physician: Product not toxic, if necessary, oxygenation

5. Fire-Fighting Measures

- Appropriate extinction measures: Non-flammable
- Non Appropriate Extinction measures: Product not flammable
- Specific Hazards related measures: Non-flammable
- Special Methods of Fire Fighting: Product not flammable,
- Use extinguishing method suitable for surrounding fire
- Protection of persons involved in fire fighting:

6. Accidental Release Measures

- Personal Precautions:
  - Dust Control: Avoid generation or inhalation of dust, use ventilation when necessary to control dust
  - Prevention of inhalation and contact with the skin, mucous and eyes:
    - Use personal protective equipment in accordance with section 8
  - Caution to the Environment: The product has no toxic substances are inert in the environment
  - Emergency and Alarm Systems: Not Applicable
  - Methods for cleaning: If you spill, remove hand using a shovel
  - Prevention of secondary hazards: In case of damage in the packing and/or spill, the product can leave the floor slippery
  - Differences in the action of large and small spills: Use machines shovel loaders for the removal of material

7. Handling and Storage

- Handling:
  - Technical Recommendations: Care with straps anchor the pallets, to avoid injuries due to projections of the same
  - Prevention of Occupational Exposure: Handle ventilated area or with a ventilation / exhaustion, avoid dust formation
  - Prevention of Fire and Explosion: Product not flammable

- Storage:
  - Appropriate Technical measures conditions for storage:
    - Respect stacking up to three pallets or big bags
  - Conditions for safe storage: Packaging damaged and wet locations
  - Packaging:
    - Recommended use: Big Bag or bags of polypolyethylene

8. Exposure Control / Personal Protection

- Parameters Specific Control
  - Occupational Exposure Limits:

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>MAK (DE) mg/m³</th>
<th>Other mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bauxite (Al₂O₃·xH₂O), calcined</td>
<td>6</td>
<td>3</td>
</tr>
</tbody>
</table>

- Biological Indicators: Not Applicable
- Other Limits and Values: Not Applicable
9. Physical and Chemical Properties

- Appearance: Solid
- Form: Spherical grains
- Color: Black
- Odor: Odorless
- PH: Neutral
- Melting Point: 1868°C
- Freezing Point: Not Applicable
- Boiling point range and initial boiling point: Not Applicable
- Flash Point: Not Applicable
- Evaporation Rate: Not Applicable
- Flammability: Product Non-flammable
- Lower limit / upper flammability or explosion: Not Applicable
- Vapor Pressure: Not Applicable
- Vapor density: Not Applicable
- Bulk Density: 2.08 g/cm³
- Solubility:
  - Water Solubility: Insoluble at 20°C
  - Sea/Water Solubility: Insoluble at 20°C
  - Alkaline Solubility: 1g of sample en 10 mL of NaOH 50% / 24 h / Temperature environment = > 0.15%
  - Acid Solubility: 5g of sample in 100mL of 12HCl + 3H2FO / 30minutes, Temperature 66°C [150.8°F] = > 6.50%
- Partition coefficient: n-octan/water: Not Applicable
- Temperature Self-Ignition: Not Applicable
- Decomposition Temperature: Not Applicable
- Viscosity: Not Applicable

10. Stability and Reactivity

- Chemical Stability: Stable under storage and handling as described in Section 7
- Reactivity: not expected to occur
- Possibility of Hazardous Reactions: Not Applicable - Conditions to Avoid: Not Applicable
- Incompatible materials or Substances: Not expected to occur
- Hazardous Decomposition Products: Not Applicable

11. Toxicological Information

- Information in accordance with the different routes of exposure
  - Acute Toxicity: Not Applicable
  - Chronic Toxicity: Not Applicable
  - Main Symptoms: Not Applicable
  - Specific Effects: Not Applicable
  - Substances that can cause effects
  - Interaction: Not Applicable
  - Additives: Not Applicable
  - Empowerment: Not Applicable
  - Synergy: Not Applicable

12. Ecological Information

- Environmental effects, behaviors, and impacts of the product
  - It isn’t expected that this product causes environmental problems during handling, application and disposal
  - Ecotoxicity: It isn’t expected that this product presents a danger
  - Persistence and degradability: Not Applicable
  - Bioaccumulative potential: Not Applicable
  - Mobility in soil: Not Applicable
  - Other adverse effects: Not Applicable

13 Disposal Considerations

- Recommended methods for treatment and disposal apply to:
  - Product: It can be arranged usually in big bags or bags, lacking these, use another container provided that support the weight
  - Remainder of products: material is inert
- Used packaging: If in good condition, can be reused and / or recycled

For disposal, it must have accordance with the laws federal, state and municipal in validity