

Material Safety Data Sheet

Bentonite Powder

1. IDENTIFICATION OF THE PRODUCT Product name: Bentonite Trade name: BENTONITE Formula: (Al,Fe1.67Mg.33)Si10(OH)2Na(+)/Ca(++)/2.33 Other/generic names: Applications: drilling fluid additive.								
2. COMPOSITION/INFORMATION ON INGEDIANTS <table style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <thead> <tr> <th style="text-align: center;">Ingredient</th> <th style="text-align: center;">CAS No</th> <th style="text-align: center;">Percent</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Bentonite</td> <td style="text-align: center;">1302-78-9</td> <td style="text-align: center;">100%</td> </tr> </tbody> </table>			Ingredient	CAS No	Percent	Bentonite	1302-78-9	100%
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3. HAZARDS IDENTIFICATION <u>Potential Health Effects</u> Hazardous in case of eye contact (irritant), of inhalation. Slightly hazardous in case of skin contact (irritant), of ingestion. <u>Potential Chronic Health Effects:</u> Hazardous in case of inhalation. CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance is toxic to lungs.								
4. FIRST AID MEASURES Eye Contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. WARM water MUST be used. Get medical attention. Skin Contact: Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Serious Skin Contact: Not available. Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention. Serious Inhalation: Not available. Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband. Serious Ingestion: Not available.								
5. FIRE-FIGHTING MEASURES Flammability of the Product: Non-flammable. Auto-Ignition Temperature: Not applicable. Flash Points: Not applicable. Flammable Limits: Not applicable. Products of Combustion: Not available. Fire Hazards in Presence of Various Substances: Not applicable. Explosion Hazards in Presence of Various Substances: Risks of explosion of the product in presence of mechanical impact: Not available.								

<p>Risks of explosion of the product in presence of static discharge: Not available.</p> <p>Fire Fighting Media and Instructions: Not applicable.</p> <p>Special Remarks on Fire Hazards: Not available.</p> <p>Special Remarks on Explosion Hazards: Not available.</p>
<p>6. ACCIDENTAL RELEASE MEASURES</p> <p>Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.</p> <p>Large Spill: Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities</p>
<p>7. HANDLING AND STORAGE</p> <p>Precautions: Do not breathe dust. Avoid contact with eyes. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If you feel unwell, seek medical attention and show the label when possible.</p> <p>Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area.</p>
<p>8. EXPOSURE CONTROLS/PERSONAL PROTECTION</p> <p>Engineering Controls: Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.</p> <p>Personal Protection: Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.</p> <p>Personal Protection in Case of a Large Spill: Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.</p> <p>Exposure Limits: TWA: 10 from ACGIH (TLV) [United States] Consult local authorities for acceptable exposure limits.</p>
<p>9. PHYSICAL AND CHEMICAL PROPERTIES</p> <p>Physical state and appearance: Solid.</p> <p>Odor: Odorless.</p> <p>Taste: Not available.</p> <p>Molecular Weight: Not available.</p> <p>Color: Beige. (Light.)</p> <p>pH (1% soln/water): Not available.</p> <p>Boiling Point: Not available.</p> <p>Melting Point: Decomposes.</p> <p>Critical Temperature: Not available.</p> <p>Specific Gravity: 2.5 (Water = 1)</p> <p>Vapor Pressure: Not applicable.</p> <p>Vapor Density: Not available.</p> <p>Volatility: Not available.</p> <p>Odor Threshold: Not available.</p> <p>Water/Oil Dist. Coeff.: Not available.</p> <p>Ionicity (in Water): Not available.</p> <p>Dispersion Properties: Not available.</p>

<p>Solubility: Very slightly soluble in cold water, hot water. Insoluble in methanol, diethyl ether, n-octanol, acetone</p>
<p>10. STABILITY AND REACTIVITY Chemical Stability: Stable under normal temperatures and pressures. Hygroscopic: absorbs moisture or water from the air. Conditions to Avoid: Incompatible materials, excess heat, exposure to moist air or water. Incompatibilities with Other Materials: Moisture, Increase volume significantly when water is added. Hazardous Decomposition Products: Irritating and toxic fumes and gases. Hazardous Polymerization: Has not been reported.</p>
<p>11. TOXICOLOGICAL INFORMATION Routes of Entry: Eye contact. Inhalation. Toxicity to Animals: LD50: Not available. LC50: Not available. Chronic Effects on Humans: Causes damage to the following organs: lungs. Other Toxic Effects on Humans: Hazardous in case of inhalation. Slightly hazardous in case of skin contact (irritant), of ingestion. Special Remarks on Toxicity to Animals: Not available. Special Remarks on Chronic Effects on Humans: Not available. Special Remarks on other Toxic Effects on Humans: Not available</p>
<p>12. ECHOLOGICAL INFORMATION Ecotoxicity: Not available. BOD5 and COD: Not available. Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise. Toxicity of the Products of Biodegradation: The products of degradation are as toxic as the original product. Special Remarks on the Products of Biodegradation: Not available.</p>
<p>13. DISPOSAL CONSIDERATIONS Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification</p>
<p>14. TRANSPORT INFORMATION Not classified as dangerous in the meaning of transport regulations.</p>
<p>15. REGULATORY INFORMATION Health Hazard: 2 Fire Hazard: 0 Reactivity: 0 Personal Protection: E National Fire Protection Association (U.S.A.): Health: 2 Flammability: 0 Reactivity: 0 Specific hazard: Protective Equipment: Gloves, Lab coat, Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Splash goggles.</p>
<p>16. OTHER INFORMATION NFPA Ratings: Health: 1 Flammability: 0 Reactivity: 0 Label Hazard Warning: WARNING! CAUSES EYE IRRITATION. Label Precautions: Avoid contact with eyes. Wash thoroughly after handling. Label First Aid: In case of eye contact, immediately flush eyes with plenty of water for at least</p>

15 minutes. Get medical attention if irritation develops or persists

Label Hazard Warning: may be harmful if swallowed.

Label Precautions: Keep container closed. Wash thoroughly after handling.

Label First Aid: If swallowed, give large amounts of water to drink. Never give anything by mouth to an unconscious person. Get medical attention.