



XI'AN FUNCTION MATERIAL GROUP CO., LTD
Material Safety Data Sheet
Cadmium hydroxide

1. Product and Company Identification

Trade Name: Cadmium hydroxide
Chemical Formula: $\text{Cd}(\text{OH})_2$

Manufacturer/Supplier: XI'AN FUNCTION MATERIAL GROUP CO., LTD
Street: No. 69, Gazelle Valley, High-Tech Zone
City: XI'AN
State: Shaanxi
Zip Code: 710077
Country: China
Tel #: +86-29-88993870/+86-13519132051

2. Hazards Identification

Signal Word: Danger



Hazard Statements: H330: Fatal if inhaled
H341: Suspected of causing genetic defects
H350: May cause cancer

Precautionary Statements: Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Do not breathe dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Wear respiratory protection
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product.

3. Composition

Chemical Family: Ceramic
Additional Names: Cadmium hydroxide

Cadmium hydroxide ($\text{Cd}(\text{OH})_2$):
Percentage: 100 wt%
CAS #: 21041-95-2
EC #: 244-168-5

4. First Aid Procedures

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| General Treatment: | Seek medical attention if symptoms persist. |
| Special Treatment: | None |
| Important Symptoms: | None |
| Inhalation: | Remove victim to fresh air. Supply oxygen if breathing is difficult. |
| Ingestion: | Seek medical attention |
| Skin: | Wash affected area with mild soap and water. Remove any contaminated clothing. |
| Eyes: | Flush eyes with water, blinking often for several minutes. Remove contact lenses if present and easy to do. Continue rinsing |

5. Firefighting Measures

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| Flammability: | Non-flammable, except as powder |
| Extinguishing Media: | No special restrictions – use suitable extinguishing agent for surrounding material and type of fire. |
| Spec. Fire Fighting Procedure: | Use full-face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. See section 10 for decomposition products. |

6. Accidental Release Measures

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| If Material Is Released/Spilled: | Wear appropriate respiratory and protective equipment specified in special protection information. Isolate spill area and provide ventilation. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for disposal. Take care not to raise dust. |
| Environmental Precautions: | Isolate runoff to prevent environmental pollution. |

7. Handling and Storage

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| Handling Conditions: | Wash thoroughly after handling. |
| Storage Conditions: | Store in a cool dry place in a tightly sealed container. Store apart from materials and conditions listed in section 10. |
| Work/Hygienic Maintenance: | Do not use tobacco or food in work area. Wash thoroughly before eating and smoking. Do not blow dust off clothing or skin with compressed air. |
| Ventilation: | Provide sufficient ventilation to maintain concentration at or below threshold limit. |

8. Exposure Controls and Personal Protection

Permissible Exposure Limits: 0.005 mg/m³ as Cd, long-term value
Threshold Limit Value: 0.01 mg/m³ as Cd, long-term value
0.002 mg/m³ as Cd, respirable fraction, long-term value

Special Equipment: None
Respiratory Protection: Use a respirator with type P100 (USA) or P3 (EN143) cartridges as a backup to engineering controls. Risk assessment should be performed to determine if air-purifying respirators are appropriate. Only use equipment tested and approved under appropriate government standards.
Protective Gloves: Nitrile rubber, NBR gloves
Eye Protection: Safety glasses or goggles
Body Protection: Protective work clothing. Wear close-toed shoes and long sleeves/pants.

9. Physical and Chemical Characteristics

Color
Form: Powder, Granules, Pellets
Odor: N/A
Water Solubility: 0.026 g/100 mL
Boiling Point: N/A
Melting Point: 232 °C
Sublimation point: N/A
Flash Point: N/A
Autoignition Temperature: N/A
Density: 4.79 g/cc
Molecular weight: 146.43 g/mol

10. Reactivity

Stability: Stable under recommended storage conditions
Reacts With: Oxidizing agents, Magnesium/magnesium alloys
Incompatible Conditions: None
Hazardous Decomposition Products: Cadmium oxide

11. Toxicological Information

Potential Health Effects:

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|--------------------------------|----------------------|
| Eyes: | May cause irritation |
| Skin: | May cause irritation |
| Ingestion: | May cause irritation |
| Inhalation: | N/A |
| Chronic: | N/A |
| Signs & Symptoms: | N/A |
| Aggravated Medical Conditions: | N/A |

Carcinogen: N/A

12. Ecological Information

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|--|------|
| Aquatic Toxicity: | High |
| Persistent Bioaccumulation Toxicity: | No |
| Very Persistent, Very Bioaccumulative: | No |
| Notes: | N/A |

13. Disposal Considerations

Dispose of in accordance with local, state, national, and international regulations.

FUNCTIONAL WATER

14. Transportation Data

Hazardous:

Hazardous for transportation.



Hazard Class:
Packing Group:
UN Number:
Proper Shipping Name:

6.1 Toxic substances.
III
UN2570
Cadmium compounds (Cadmium oxide)

15. Regulatory Information

Sec 302 Extremely Hazardous: No
Sec 304 Reportable Quantities: N/A
Sec 313 Toxic Chemicals: Yes

16. Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

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