

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

## Aluminum Diboride

1. Product and Company Identification		
Trade Name:	Aluminum Diboride	
Chemical Formula:	$\mathrm{AlB}_2$	
Recommended Use:	Scientific research and development	
Manufacturer/Supplier:	XI'AN FUNCTION MATERIAL GROUP CO., LTD	
Street:	No. 69, Gazelle Valley, High-Tech Zone	
City:	XI'AN	
State:	Shannxi	
Zip Code:	710077	
Country:	China	
Tel #:	+86-29-88993870/+86-13519132051	
	2. Hazards Identification	
Signal Word:	None	
Hazard Statements:	None	
Precautionary Statements:	None	
HMIS Health Ratings (0-4):		
Health:	0	
Flammability:		
Physical:		
Tilysical.		
	3. Composition	
Chemical Family:	Ceramic	
Additional Names:	Aluminum Boride	
Aluminum Diboride (AlB <sub>2</sub> ):		
Percentage:	100 wt%	
CAS #:	12041-50-8	
EC #:	234-923-7	
	4. First Aid Procedures	
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:	Never induce vomiting or give anything by mouth to an unconscious person.	
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 Flammability: Non-flammable 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 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. Do not let product enter drains. 7. Handling and Storage Handling Conditions: Wash thoroughly after handling. Store in a cool dry place in a tightly sealed container. Store apart from **Storage Conditions:** 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: N/A Threshold Limit Value: N/A Special Equipment: None Respiratory Protection: **Dust Respirator** Protective Gloves: Rubber gloves Eve Protection: Safety glasses or goggles **Body Protection:** Protective work clothing. Wear close-toed shoes and long sleeves/pants. 9. Physical and Chemical Characteristics Color N/A Form: Powder, Granules, Pellets, Sputtering target, Custom parts Odor: **Odorless** Water Solubility: Insoluble **Boiling Point:** N/A Melting Point: N/A Flash Point: N/A **Autoignition Temperature:** N/A Density: N/A Molecular weight: 48.60 g/mol

10. Reactivity		
Stability:	Stable under recommended storage conditions	
Reacts With:	Oxidizing agents, Acids	
Incompatible Conditions:	None	
Hazardous Decomposition Products:	Borane Oxides, Boron Oxide, Aluminum Oxide, Metal oxide fume	
1	1. Toxicological Information	
Potential Health Effects:		
Eyes:	N/A	
Skin:	N/A	
Ingestion:	N/A	
Inhalation:	N/A	
Chronic:	N/A	
Signs & Symptoms:	N/A	
Aggravated Medical Conditions:	N/A	
Median Lethal Dose:	N/A	
Carcinogen:	IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.  ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.  NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.  OSHA: No component of this product present at levels greater than or	
	equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.  12. Ecological Information	
Aquatic Toxicity:	N/A	
Persistent Bioaccumulation Toxicity:	No	
Very Persistent, Very Bioaccumulative:		
Notes:	N/A	
	13. Disposal Considerations	
Dispose of in accordance with local, state, n	ational, and international regulations.	
	14. Transportation Data	
Hazardous:	Not hazardous for transportation.	
Hazard Class:	N/A	
Packing Group:	N/A	
UN Number:	N/A	
Proper Shipping Name:	N/A	
	15. Regulatory Information	
Sec 302 Extremely Hazardous:	No	
Sac 204 Papartable Quantities:	N/A	
Sec 304 Reportable Quantities: Sec 313 Toxic Chemicals:	No	

## 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.

Document Last Revised: 03/14/2017