



MATERIAL SAFETY DATA SHEET  
COMPLIES WITH 29 CFR 1910.1200.  
OSHA HAZARD COMMUNICATION RULE

DATE OF LAST REVISION: 05-08-96

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## CHEMICAL IDENTITY

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LABEL IDENTITY	<b>LANTHANUM BORIDE</b>
CHEMICAL NAME/SYNONYMS	<b>LANTHANUM BORIDE</b>
FORMULA	<b>LaB6</b>
CHEMICAL FAMILY	<b>METAL BORIDE</b>
CALCULATED MOLECULAR WEIGHT	<b>203.776</b>
CAS REGISTRY NUMBER	<b>12008-21-8, LISTED IN THE TSCA INVENTORY</b>
HAZARDOUS INGREDIENTS	<b>LANTHANUM BORIDE</b>
%: <b>100</b>	TLV: <b>NO DATA</b> OSHA/PEL: <b>NO DATA</b>
	<b>10mg/m3 (as B2O3)</b>

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## PHYSICAL AND CHEMICAL PROPERTIES

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COLOR, FORM	<b>Purple crystals or powder</b>
BOILING POINT	<b>Decomposes</b>
DENSITY (gm/cc)	<b>2.61</b>
VAPOR PRESSURE @ 20°	<b>NA</b>
% VOLATILE BY VOLUME (%)	<b>NA</b>
REACTION WITH WATER	<b>None</b>
EVAPORATION RATE (H2O=1)	<b>NA</b>
SOLUBILITY IN WATER	<b>Insoluble</b>
MELTING POINT	<b>2210</b>
OTHER	<b>Insoluble in HCl</b>

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## FIRE AND EXPLOSION HAZARD DATA

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FLASH POINT	<b>NA</b>
AUTOIGNITION TEMPERATURE (°C)	<b>NA</b>
FLAMMABILITY	<b>None, explosive as fine dust</b>
EXTINGUISHING MEDIA	<b>Use dry chemical, CO<sub>2</sub>.</b>
SPECIAL FIRE FIGHTING PROCEDURES	<b>Wear a self-contained breathing apparatus and full protective clothing to prevent contact with skin and eyes.</b>
UNUSUAL FIRE & EXPLOSION HAZARDS	<b>Explosion hazard as a fine dust, especially if over 600°C. Material may generate toxic fumes if involved in fire.</b>





## LANTHANUM BORIDE MATERIAL SAFETY DATA SHEET

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### SAFE HANDLING AND USE

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STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: **wear a self-contained breathing apparatus and full protective clothing. Isolate area where spill occurred, and insure proper ventilation is available, vacuum up spill using high efficiency unit and place into a container for proper disposal. Take care not to raise dust.**

#### WASTE DISPOSAL METHOD:

**Consult federal, state and local regulations for proper disposal.**

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### SPECIAL PROTECTIVE INFORMATION

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RESPIRATORY PROTECTION	<b>NIOSH approved dust-mist-fume respirator</b>
LOCAL EXHAUST	<b>Maintain below TLV levels</b>
MECHANICAL (general)	<b>Recommended</b>
SPECIAL	<b>NA</b>
OTHER	<b>NA</b>
PROTECTIVE GLOVES	<b>Neoprene</b>
EYE PROTECTION	<b>Safety goggles</b>
OTHER PROTECTIVE EQUIPMENT	<b>Wear protective clothing to prevent contamination of skin and clothes</b>

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### SPECIAL PRECAUTIONS

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#### PRECAUTIONS TO BE TAKEN IN HANDLING/STORAGE:

**Store in dry cool location. Wash hands and face thoroughly after handling and before eating.**

TRANSPORTATION REQUIREMENTS	DOT CLASS:	<b>Not Classified</b>
	UN NUMBER:	<b>NC</b>
	IMCO CLASS:	<b>NC</b>
	OTHER:	

PRECAUTIONARY LABELING **NONE**

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THE ABOVE INFORMATION IS ACCURATE TO THE BEST OF OUR KNOWLEDGE. HOWEVER, SINCE DATA, SAFETY STANDARDS AND GOVERNMENT REGULATIONS ARE SUBJECT TO CHANGE THE CONDITIONS OF HANDLING AND USE, OR MISUSE ARE BEYOND OUR CONTROL, **ANGSTROM SCIENCES** MAKE NO WARRANTY, EITHER EXPRESSED OR IMPLIED, WITH RESPECT TO THE COMPLETENESS OR CONTINUING ACCURACY OF THE INFORMATION CONTAINED HEREIN AND DISCLAIMS ALL LIABILITY FOR THE RELIANCE THEREON. USER SHOULD SATISFY HIMSELF THAT HE HAS ALL CURRENT DATA RELEVANT TO HIS PARTICULAR USE.

**NA= NOT APPLICABLE**

**ND= NO DATA FOUND**



## SECTION 5 CONTINUED:

### HEALTH HAZARD

**INGESTION:** no symptoms expected, as this compound is soluble in stomach acid. As a rare earth compound, chronic exposure could increase blood clotting time. Borides are considered industrial poisons, affecting the CNS and liver. Symptoms of boron poisoning include, vomiting, diarrhea and scarletina form body rash. Symptoms of acute lanthanide toxicity in rats are immediate defecation, writhing, ataxia, sedation, labored respiration, and reduced activity. Death is mainly due to respiratory and cardiac failure. Chronic lanthanide intoxication causes renal hepatic derangement and increases coagulation time. Lanthanide salts cause blistering and discoloring of the cornea. Lanthanide targets the liver, causing fatty liver degeneration and a decrease in liver glycogen and blood glucose levels.