



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

DATE OF LAST REVISION: 05-26-07

CHEMICAL IDENTITY

LABEL IDENTITY	LANTHANUM ALUMINATE
CHEMICAL NAME/SYNONYMS	LANTHANUM ALUMINATE
FORMULA	LaAlO₃
CHEMICAL FAMILY	NA
CAS REGISTRY NUMBER	NA
HAZARDOUS INGREDIENTS	ALUMINUM OXIDE COMPOUNDS
%: 100	TLV: 10mg/m³ OSHA/PEL: 10mg/m³

PHYSICAL AND CHEMICAL PROPERTIES

COLOR, FORM AND ODOR	ND
BOILING POINT	Not known
DENSITY (gm/cc)	Not known
VAPOR PRESSURE @ 20°	No information
% VOLATILE BY VOLUME (%)	None
REACTION WITH WATER	No information
EVAPORATION RATE (H ₂ O=1)	None
SOLUBILITY IN WATER	Mineral acids
MELTING POINT	None

FIRE AND EXPLOSION HAZARD DATA

FLASH POINT	None
AUTOIGNITION TEMPERATURE (° C)	NA
FLAMMABILITY	NA
EXTINGUISHING MEDIA	Use suitable means for extinguishing surrounding fire
SPECIAL FIRE FIGHTING PROCEDURES	Wear a self-contained breathing apparatus and full protective clothing to prevent contact with skin and eyes.
UNUSUAL FIRE & EXPLOSION HAZARDS	None



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HEALTH HAZARD INFORMATION

TOXICITY DATA: **R & D material, limits not established, treat as Al₂O₃: 10mg/m³**
HMIS RATING:
HEALTH: **na** FLAMMABILITY: **na** REACTIVITY: **na** PERSONAL PROTECTION: **na**

ROUTES OF ENTRY

INHALATION:	Yes
SKIN:	Yes
INGESTION:	Yes

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE: **No data**
EFFECTS OF OVEREXPOSURE (acute and chronic):
R & D material, effects not established

CARCINOGENICITY: **Na** NTP: **Na** IARC MONOGRAPHS: **Na** OSHA REGULATE: **Na**

EMERGENCY FIRST AID PROCEDURES:
INGESTION: **seek medical attention.**
INHALATION: **remove victim to fresh air**
SKIN CONTACT: **wash affected area with soap and water**
EYE CONTACT: **seek medical attention.**
seek medical attention in all cases mentioned above

REACTIVITY DATA

STABILITY	Stable
CONDITIONS CONTRIBUTING TO UNSTABILITY	Not known
INCOMPATIBILITY (MATERIALS TO AVOID)	Not known
HAZARDOUS DECOMPOSITION PRODUCTS	None
HAZARDOUS POLYMERIZATION	Will Not Occur
CONDITIONS TO AVOID	None known



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SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Pick up and place in suitable container for reclamation or disposal in a method that does not generate dust.

WASTE DISPOSAL METHOD:

Consult federal, state and local regulations for proper disposal.

SPECIAL PROTECTIVE INFORMATION

RESPIRATORY PROTECTION	NIOSH approved, consult supplier for all limitations
LOCAL EXHAUST	Preferred
MECHANICAL (general)	NA
SPECIAL	NA
OTHER	NA
PROTECTIVE GLOVES	Recommended
EYE PROTECTION	Always recommended
OTHER PROTECTIVE EQUIPMENT	Lab coat or apron

SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING/STORAGE:

Keep in tightly closed container, store in a cool, dry ventilated area, isolate from incompatible substances.

TRANSPORTATION REQUIREMENTS	DOT CLASS:	NA
	UN NUMBER:	NA
	IMCO CLASS:	NA
	OTHER:	NA

PRECAUTIONARY LABELING **NONE**

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