



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

DATE OF LAST REVISION: 05-23-96

CHEMICAL IDENTITY

LABEL IDENTITY	NEODYMIUM GALLIUM OXIDE
CHEMICAL NAME/SYNONYMS	NEODYMIUM GALLATE
FORMULA	NdGaO3
HAZARDOUS INGREDIENTS	
NdGaO3	90%; unknown oral toxicity, OSHA/PEL, ACGIH and Carcinogen
Nd2Ga3	<5%; 10mg/m3 OSHA: 5mg/m3 ACGIH, no Carcinogen
Ga2O3	<5%; 10g/gk oral toxicity; no list OSHA & ACGIH, no Carcinogen

PHYSICAL AND CHEMICAL PROPERTIES

COLOR, FORM AND ODOR	Light blue powder, odorless
BOILING POINT	ND
DENSITY (gm/cc)	ND
VAPOR PRESSURE @ 20°	ND
% VOLATILE BY VOLUME (%)	None
REACTION WITH WATER	NA
EVAPORATION RATE (H2O=1)	None
SOLUBILITY	Mineral acids
MELTING POINT	NA

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
UNUSUAL FIRE & EXPLOSION HAZARDS	None



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HEALTH HAZARD INFORMATION

TOXICITY DATA **No data**

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: **ND**
EFFECTS OF OVEREXPOSURE (acute and chronic): **R&D MATERIAL, NO LIMITS ESTABLISHED**

INHALATION: **ND**
DERMAL/EYE: **ND**
INGESTION: **ND**
CARCINOGENICITY: **ND**

CARCINOGENICITY: **no** NTP: **no** IARC MONOGRAPHS: **no** OSHA REGULATE: **no**

EMERGENCY FIRST AID PROCEDURES:

INGESTION: **seek immediate medical attention**
INHALATION: **remove to fresh air**
SKIN CONTACT: **wash thoroughly with soap and water**
EYE CONTACT: **ND**

REACTIVITY DATA

STABILITY	Stable
CONDITIONS CONTRIBUTING TO UNSTABILITY	None
INCOMPATIBILITY (MATERIALS TO AVOID)	None determined, will dissolve in concentrated nitric acid
HAZARDOUS DECOMPOSITION PRODUCTS	None
HAZARDOUS POLYMERIZATION	Will Not Occur
CONDITIONS TO AVOID	None



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SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: **pick up and place in a suitable container for reclamation or disposal in a method that doesn't generate dust.**

WASTE DISPOSAL METHOD:

Consult federal, state and local regulations for proper disposal.

SPECIAL PROTECTIVE INFORMATION

RESPIRATORY PROTECTION	NIOSH approved (consult supplier for specs.)
LOCAL EXHAUST	Preferred, consult ACGIH document
MECHANICAL (general)	ND
SPECIAL	ND
OTHER	ND
PROTECTIVE GLOVES	Recommended
EYE PROTECTION	Always wear eye protection
OTHER PROTECTIVE EQUIPMENT	Lab coat or apron

SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING/STORAGE: **keep in tightly closed containers, store in cool, dry ventilated area, isolate from incompatible substances.**

TRANSPORTATION REQUIREMENTS	DOT CLASS:	Not Classified
	UN NUMBER:	NC
	IMCO CLASS:	NC
	OTHER:	NA

PRECAUTIONARY LABELING **NONE**

OTHER PRECAUTIONS: **for laboratory use only. Not for drug, household or other uses. This is a R&D material and should only be used by qualified staff.**

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

NR=NOT RECORDED