



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

DATE OF LAST REVISION: 05-01-96

CHEMICAL IDENTITY

LABEL IDENTITY	GADOLINIUM
CHEMICAL NAME/SYNONYMS	GADOLINIUM
FORMULA	Gd
CHEMICAL FAMILY	ND
CAS REGISTRY NUMBER	ND
HAZARDOUS INGREDIENTS	NONE

PHYSICAL AND CHEMICAL PROPERTIES

COLOR, FORM AND ODOR	Silver, metallic, odorless
BOILING POINT	3000°C
DENSITY (gm/cc)	NA
VAPOR PRESSURE @ 20°	NA
% VOLATILE BY VOLUME (%)	NA
REACTION WITH WATER	ND
EVAPORATION RATE (H2O=1)	7.9
SOLUBILITY IN WATER	Insoluble
MELTING POINT	1312

FIRE AND EXPLOSION HAZARD DATA

FLASH POINT	NA
AUTOIGNITION TEMPERATURE (°C)	ND
FLAMMABILITY	NA
EXTINGUISHING MEDIA	Metal fire agent
SPECIAL FIRE FIGHTING PROCEDURES	None
UNUSUAL FIRE & EXPLOSION HAZARDS	Finely divided metal can oxidize rapidly.



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HEALTH HAZARD INFORMATION

TOXICITY DATA **ND**
HMIS RATING:
HEALTH: FLAMMABILITY: REACTIVITY: PERSONAL PROTECTION: **sect 8**

ROUTES OF ENTRY
INHALATION: **No**
SKIN: **No**
INGESTION: **Yes**

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE: **Unknown**
EFFECTS OF OVEREXPOSURE (acute and chronic):
DERMAL **can cause irritation**
EYE **can cause particle irritation**
INGESTION **unknown**

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

EMERGENCY FIRST AID PROCEDURES:
INGESTION **Seek medical attention.**
INHALATION **Seek medical attention.**
SKIN CONTACT **Wash with water.**
EYE CONTACT **Flush with water.**

REACTIVITY DATA

STABILITY **Stable**
CONDITIONS CONTRIBUTING TO UNSTABILITY **None**
INCOMPATIBILITY (MATERIALS TO AVOID) **Acids, bases, etc.**
HAZARDOUS DECOMPOSITION PRODUCTS **None**
HAZARDOUD POLYMERZATION **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:

No special handling required, sweep up.

WASTE DISPOSAL METHOD:

Oxidize safely-dispose of in an approved chemical landfill.

SPECIAL PROTECTIVE INFORMATION

RESPIRATORY PROTECTION	Recommended for powder
LOCAL EXHAUST	Recommended
MECHANICAL (general)	Recommended
SPECIAL	NA
OTHER	NA
PROTECTIVE GLOVES	Recommended
EYE PROTECTION	Recommended
OTHER PROTECTIVE EQUIPMENT	None

SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING/STORAGE:

Store in argon finely divided metal can oxidize rapidly.

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