





## GALLIUM METAL MATERIAL SAFETY DATA SHEET

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### HEALTH HAZARD INFORMATION

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TOXICITY DATA **scu-rat 110mg/kg MLD**  
HMIS RATING:  
HEALTH: **2** FLAMMABILITY: **0** REACTIVITY: **1** PERSONAL PROTECTION: **E**

ROUTES OF ENTRY INHALATION: **Yes**  
SKIN: **Yes**  
INGESTION: **Yes**

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE: **Respiratory Disorders**

EFFECTS OF OVEREXPOSURE (acute and chronic):

INHALATION: **may cause sneezing, coughing, difficulty breathing and irritation of the mucous membrane of the respiratory tract.**

DERMAL: **may cause irritation, itching, inflammation and dermatitis**

EYE: **may cause burning sensation, irritation, redness and watering of the eyes if comes in contact.**

OTHER: **Gallium metal: highly toxic via subcutaneous route. It has a metallic taste, causes generalized maculopapular rash, exfoliative dermatitis and depression of bone marrow function. It also causes anorexia, nausea and vomiting.**

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

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EMERGENCY FIRST AID PROCEDURES:

INGESTION: **give 1-2 glasses of milk or water to induce vomiting.**

INHALATION: **remove victim to fresh air, administer oxygen if necessary.**

SKIN: **brush material off skin, wash affected area with soap and water.**

EYE: **flush with lukewarm water for at least 15 minutes.**

**\*SEEK MEDICAL ATTENTION ON ALL OCCASIONS\***

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### REACTIVITY DATA

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STABILITY	<b>Stable</b>
CONDITIONS CONTRIBUTING TO UNSTABILITY	<b>None</b>
INCOMPATIBILITY (MATERIALS TO AVOID)	<b>Halogens</b>
HAZARDOUS DECOMPOSITION PRODUCTS	<b>Ga, GaOx</b>
HAZARDOUS POLYMERIZATION	<b>Will Not Occur</b>
CONDITIONS TO AVOID	<b>Heat, flame &amp; incompatible materials</b>



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### SAFE HANDLING AND USE

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

**Wear self-contained breathing apparatus and full protective clothing. Isolate area, insure proper ventilation and vacuum spill (use high efficiency unit) and place in 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/MSHA approved dust-mist-fume cartridge respirator</b>
LOCAL EXHAUST	<b>Maintain below TLV</b>
MECHANICAL (general)	<b>Recommended</b>
SPECIAL	<b>Handle in dry, controlled atmosphere</b>
OTHER	<b>NA</b>
PROTECTIVE GLOVES	<b>Neoprene</b>
EYE PROTECTION	<b>Safety glasses</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 tightly closed container, store in cool, dry place, wash hands and face thoroughly after handling and before meals.**

TRANSPORTATION REQUIREMENTS	DOT CLASS:	<b>ORM-B</b>
	UN NUMBER:	<b>2803</b>
	IMCO CLASS:	<b>9</b>
	OTHER:	<b>SPC</b>

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**