



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

DATE OF LAST REVISION: 03-04-07

CHEMICAL IDENTITY

LABEL IDENTITY	CHROMIUM METAL
CHEMICAL NAME/SYNONYMS	CHROMIUM METAL
FORMULA	Cr
CHEMICAL FAMILY	METAL ELEMENT
CAS REGISTRY NUMBER	7440-47-3, LISTED IN THE TSCA INVENTORY
HAZARDOUS INGREDIENTS	CHROMIUM
%: 100.0	TLV: 0.5mg/m3 OSHA/PEL: 1mg/m³

PHYSICAL AND CHEMICAL PROPERTIES

COLOR, FORM AND ODOR	Steel-gray, lustrous metal with cubic structure
ODOR	Odorless
BOILING POINT	2672°C
DENSITY (gm/cc)	7.20
VAPOR PRESSURE @ 20°	1
% VOLATILE BY VOLUME (%)	ND
REACTION WITH WATER	None
EVAPORATION RATE (H2O=1)	ND
SOLUBILITY IN WATER	Insoluble
MELTING POINT	1857°C

FIRE AND EXPLOSION HAZARD DATA

FLASH POINT	NA
AUTOIGNITION TEMPERATURE (° C)	400 C for powder
FLAMMABILITY	Flammable Solid
EXTINGUISHING MEDIA	Suitable extinguishing agent for metal fires
SPECIAL FIRE FIGHTING PROCEDURES	Wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing. Fumes from fire are hazardous. Isolate runoff to prevent environmental pollution
UNUSUAL FIRE & EXPLOSION HAZARDS	Ignites and is potentially explosive in atmospheres of carbon dioxide. Chromium reacts violently or explosively when heated with ammonium nitrate and bromine pentafluoride. Chromium has an incandescent reaction with nitrogen oxide or sulfur dioxide. Powders prepared by evaporation of mercury from chromium amalgam may be pyrophoric



CHROMIUM METAL MATERIAL SAFETY DATA SHEET

HAZARDOUS POLYMERIZATION
CONDITIONS TO AVOID

Will Not Occur
Grinding, crushing, and melting may produce dust and fumes which may require control.

SAFE HANDLING AND USE

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

Wear appropriate respiratory and protective equipment specified in section VIII-control Measures. Isolate spill area and provide ventilation. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a container for proper disposal. Take care not to raise dust. Use non-sparking tools.

WASTE DISPOSAL METHOD:

Consult federal, state and local regulations for proper disposal.

SPECIAL PROTECTIVE INFORMATION

RESPIRATORY PROTECTION
LOCAL EXHAUST
MECHANICAL (general)
SPECIAL
PROTECTIVE GLOVES
EYE PROTECTION

NIOSH full face respirator
Recommended, if dusty
Good ventilation
None
Impervious gloves
Chemical workers dust-proof goggles
(under dusting conditions)

OTHER PROTECTIVE EQUIPMENT

Maintain sink, safety shower and eyewash fountain in the work area. Wear full protective clothing at all times.

SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING/STORAGE:

Store in tightly closed containers in a cool, dry place. Wash hands and face thoroughly.

TRANSPORTATION REQUIREMENTS

DOT CLASS: **Not Hazardous**

UN NUMBER: **NC**

IMCO CLASS: **NC**

OTHER:

OTHER PRECAUTIONS IN 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