

# SAFETY DATA SHEET

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

### Product Identification

Product Name: Ticonium 2000 Alloy  
Product Number: 62174, 62174K25  
Chemical Name: Chrome Cobalt Alloy  
Chemical Family: Metal Alloy  
CAS Number: Blend

### Company Identification

Ticonium, Div. of CMP Industries LLC  
413 North Pearl Street  
Albany, NY 12207 USA  
(518)-434-3147 (For product information)  
(800)-833-2343 (For emergencies)  
1-800-424-9300 or 1-703-527-3887 (CHEMTREC)

## 2. HAZARDS IDENTIFICATION

### **EMERGENCY OVERVIEW:**

WARNING: US Hazard Classification: Hazardous.

### **GHS Classification:**

Respiratory or skin Sensitization - Category 1  
Chronic aquatic toxicity - Category 4

### **GHS Hazard Symbols:**

Irritant, Health Hazard, Environmentally Damaging



### **GHS Hazard Statements:**

H317 - May cause an allergic skin reaction.  
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H413 - May cause long lasting harmful effects to aquatic life.

### **GHS Precautionary Statements:**

P273 - Avoid release to the environment.  
P285 - In case of inadequate ventilation wear respiratory protection.  
P302/352 - IF ON SKIN: Wash with plenty of soap and water.



P304/341 - IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P342/311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

P363 - Wash contaminated clothing before reuse.

**EYE:**

Causes eye irritation.

**SKIN:**

May cause skin irritation.

**INHALATION:**

Dust may be slightly irritating to respiratory tract.

**INGESTION:**

Ingestion is not considered a potential route of exposure.

**CHRONIC EFFECTS:**

Persons with with impaired pulmonary function should not be subjected to excessive airborne concentrations.

**REPRODUCTIVE HAZARDS:**

None.

**CARCINOGENICITY INFORMATION:**

Cobalt is listed by IARC or NTP as possible carcinogen. None of the components of this product are listed as carcinogens by OSHA, IARC, NTP, ACGIH or the EU Directive.

**MEDICAL CONDITIONS AGRAVATED BY EXPOSURE:**

Individuals with impaired pulmonary function should not be subjected to excessive airborne concentrations.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**COMPONENT LISTING:**

Chemical Name	Amount	CAS Number
COBALT	40.0 - 70.0 %	7440-48-4
CHROMIUM	10.0 - 40.0 %	7440-47-3
MOLYBDENUM	1.0 - 10.0 %	7439-98-7
SILICON	0.0 - 5.0 %	7440-21-3

This product contains hazardous materials as defined by the OSHA Hazard Communication Standard 29 CFR 1910.1200.

As defined under Sara 311 and 312, this product contains materials that are acute, chronic hazards.

### 4. FIRST AID MEASURES

**EYE CONTACT FIRST AID:**

Immediately flush eyes with plenty of water.

**INHALATION FIRST AID:**

Remove to fresh air. If breathing is difficult, remove to fresh air and provide oxygen. Seek medical attention.



**INGESTION FIRST AID:**

Swallow large amounts of water and do not induce vomiting. Obtain medical help.

## 5. FIRE FIGHTING MEASURES

**FLAMMABLE PROPERTIES**

COC Flash Point: N/A

Autoignition Temperature: N/A

**FLAMMABLE LIMITS IN AIR**

LEL: N/A

UEL: N/A

**FLAMMABLE PROPERTIES:**

Not Flammable.

**EXTINGUISHING MEDIA:**

Use extinguishing media appropriate for surrounding fire.

**FIRE & EXPLOSION HAZARDS:**

None.

**COMBUSTION PRODUCTS:**

None.

## 6. ACCIDENTAL RELEASE MEASURES

**LARGE SPILLS PROCEDURE:**

In solid form this material poses no special clean up problems. Remove dust by vacuuming or wet sweeping to avoid air contamination. Protective clothing not normally required during clean up procedures.

**SMALL SPILLS PROCEDURE:**

Same as large spill.

**MISCELLANEOUS:**

Prevent entry into sewers and waterways. Spill and release reporting requirements vary. Consult local authorities regarding requirements.

## 7. HANDLING AND STORAGE

**HANDLING (PERSONNEL):**

Do not breathe dust or fumes. Do not eat, drink or smoke in work area.

**HANDLING (PHYSICAL ASPECTS):**

Store in a tightly closed container in a cool, well ventilated location away from incompatible materials. Store away from food or beverages.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION



**ENGINEERING CONTROLS:**

If user operations generate dust, fume, or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**EYE / FACE PROTECTION REQUIREMENTS:**

Safety glasses are recommended to avoid contact with eyes.

**SKIN PROTECTION REQUIREMENTS:**

Wear leather gloves to minimize skin contamination.

**RESPIRATORY PROTECTION REQUIREMENTS:**

Use a NIOSH approved organic vapor respirator when exposed to vapor from heated material.

**EXPOSURE GUIDELINES:**

**COBALT**

OSHA PEL: .1 mg/m<sup>3</sup>  
OSHA TWA: 0.5 mg/m<sup>3</sup>

**CHROMIUM**

OSHA PEL: 1 mg/m<sup>3</sup>  
OSHA TWA: 0.5 mg/m<sup>3</sup>

**MOLYBDENUM**

OSHA PEL: 15 mg/m<sup>3</sup>  
OSHA TWA: 5 mg/m<sup>3</sup>

**SILICON**

OSHA PEL: 15 mg/m<sup>3</sup>  
OSHA TWA: 10 mg/m<sup>3</sup>

## 9. PHYSICAL AND CHEMICAL PROPERTIES

FORM:	Ingot
COLOR:	Silver
ODOR:	None
BOILING POINT:	2750 F
SOLUBILITY IN WATER:	Insoluble
SPECIFIC GRAVITY:	8.2 (Water = 1)
MELTING/FREEZING POINT:	2430-2485 F

## 10. STABILITY AND REACTIVITY

**STABILITY:**

Stable.

**POLYMERIZATION:**

Product will not undergo polymerization.

**INCOMPATIBILITY WITH OTHER MATERIALS:**

Mineral acids and strong oxidizing agents.

**DECOMPOSITION:**

Metal oxides may be generated from melting.



## 11. TOXICOLOGICAL INFORMATION

### EYE EFFECTS:

May cause eye irritation.

### SKIN EFFECTS:

May cause skin irritation. May cause allergic skin reaction(sensitization).

### ACUTE ORAL EFFECTS:

Acute oral LD 50, rat:6174mg/kg.

### CHRONIC EFFECTS /:

May cause respiratory disease.

### COBALT

Test Code: Oral LD50

Species: Rat

Results: 1500 mg/kg

### CHROMIUM

Test Code: Implant TDLO

Species: Rat

Results: 1200 micrograms/kg of body weight administered intermittently over a six week period.

### MOLYBDENUM

Test Code: Intraperitoneal LD50

Species: Rat

Results: 114 mg/kg

## 12. ECOLOGICAL INFORMATION

### MISCELLANEOUS:

Dike and contain spill with absorbent material such as clay or commercial absorbent.

## 13. DISPOSAL CONSIDERATIONS

### WASTE DISPOSAL:

Dispose of waste material in accordance with all local, state/provincial, and national requirements.

## 14. TRANSPORT INFORMATION

PRODUCT LABEL:	Ticonium 2000 Alloy
D.O.T. SHIPPING NAME:	N/A
TECHNICAL SHIPPING NAME:	N/A
D.O.T. HAZARD CLASS:	N/A
UN NUMBER:	N/A



## 15. REGULATORY INFORMATION

### REGULATORY LISTS SEARCHED:

01 = SARA 313	02 = CA Proposition 65
03 = SARA 302/304	04 = CERCLA 302.4
05 = ACGIH TWA	06 = ACGIH STEL
07 = ACGIH CALC TLV	08 = OSHA PEL
09 = CANADIAN WHMIS	10 = OSHA Ceiling

### EEC Symbols and Indications of Danger:

Harmful (Xn), Irritant (Xi), Dangerous For The Environment (N)



### R-Phrases:

R42/43 - May cause sensitization by inhalation and skin contact.  
R53 - May cause long-term adverse effects in the aquatic environment.

### S-Phrases:

S36/37 - Wear suitable protective clothing and gloves.  
S59 - Refer to manufacturer/supplier for information on recovery/recycling.  
S61 - Avoid release to the environment. Refer to special instructions/safety data sheets.

### WHMIS Hazard Symbols:

None

### Canadian Disclosure List

COBALT (7440-48-4)  
CHROMIUM (7440-47-3)  
MOLYBDENUM (7439-98-7)

### SARA Title III - Section 313

COBALT (7440-48-4)  
CHROMIUM (7440-47-3)

### CERCLA Hazardous Substances

CHROMIUM (7440-47-3) -- RQ 5000 lb

### RCRA Hazardous Substances

CHROMIUM (7440-47-3) -- RCRA Code: D007

### Title V

COBALT (7440-48-4)  
CHROMIUM (7440-47-3)  
MOLYBDENUM (7439-98-7)

### CA Proposition 65

COBALT (7440-48-4)

### SC Toxic Air Pollutants List



CHROMIUM (7440-47-3)  
MOLYBDENUM (7439-98-7)  
SILICON (7440-21-3)

## 16. OTHER INFORMATION

REASON FOR ISSUE: Add Current date to MSDS  
PREPARED BY: John Nicpon  
APPROVED BY: John Nicpon  
TITLE: Quality Manager  
APPROVAL DATE: March 26, 2015  
SUPERCEDES DATE: October 31, 2013  
RTN NUMBER: 00000309 (Official Copy)

### HMIS Rating:

Health - 2  
Flammability - 0  
Reactivity - 0

### ABBREVIATIONS USED IN THIS MSDS:

TLV - THRESHOLD LIMIT VALUE	TWA - Time Weighted Average
STEL - SHORT TERM EXPOSURE LIMIT	TPQ - Threshold Planning Quantity
RQ - REPORTABLE QUANTITY	PEL - Permissible Exposure Limit
C - CEILING LIMIT	CAS - Chemical Abstract Service Number
NDA - NO DATA AVAILABLE	N/A - Not Applicable or Not Available

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**END OF SAFETY DATA SHEET**

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