

**Trade name:** WIRONIUM RP (REF 50530)**Current version :** 1.0.0, issued: 07.01.2025**Replaced version:** -, issued: -**Region:** USA**SECTION 1: Identification****1.1 Product identifier**

Trade name

**WIRONIUM RP (REF 50530)****1.2 Recommended use of the chemical and restrictions on use****Recommended use of the chemical and restrictions on use**

Manufacturing of dental prosthesis in a dental laboratory

**Restrictions on use**

No data available.

**1.3 Details of the supplier of the safety data sheet****Address**BEGO USA, Inc.  
24 Albion Road, Suite 103  
Lincoln RI 02865Telephone no. 401-334-9261  
e-mail begoinfo@begousa.com**1.4 Emergency phone number**BEGO USA  
+1 401-334-9261 (8.30 a.m - 5.00 p.m EST)**SECTION 2: Hazard(s) identification****2.1 Classification of the chemical****Classification of the chemical in accordance with paragraph (d) of 29 CFR § 1910.1200 "Hazard Communication"**Carcinogenicity - Category 1B  
Germ Cell Mutagenicity - Category 2  
Reproductive Toxicity - Category 1B  
Respiratory sensitization - Category 1  
Skin sensitization - Category 1**2.2 Label elements****Pictogram(s)****Signal word**

Danger

**Hazard Statement(s)**

Health hazards

May cause an allergic skin reaction  
May cause allergy or asthma symptoms or breathing difficulties if inhaled  
Suspected of causing genetic defects  
May cause cancer.  
May damage fertility or the unborn child.**Precautionary Statement(s)**

Prevention

Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Contaminated work clothing must not be allowed out of the workplace.  
Wear protective gloves/protective clothing/eye protection/face protection.  
In case of inadequate ventilation wear respiratory protection.

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Response	If on skin: Wash with plenty of water. If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. If exposed or concerned: Get medical advice/attention. Specific treatment (see first aid instruction on this label). If experiencing respiratory symptoms: Call a poison center/doctor. Wash contaminated clothing before reuse.
Storage	Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations

### 2.3 Labelling information

No data available

### 2.4 Hazards not otherwise classified (HNOC)

No data available

## SECTION 3: Composition / information on ingredients

### 3.1 Substances

Not applicable. The product is not a substance.

### 3.2 Mixtures

#### Hazardous ingredients

No	Substance name	Concentration	%
	CAS no.		
1	cobalt		
	7440-48-4	>= 50.00 - < 70.00	%-b.w.

### 3.3 Other information

The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of 29 CFR 1910.1200

## SECTION 4: First-aid measures

### 4.1 Description of necessary first-aid measures

#### General information

In case of persisting adverse effects, consult a physician. In case of allergic symptoms, especially respiratory tract related, seek medical help immediately. Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing. If the patient is likely to become unconscious, place and transport in stable sideways position.

#### After inhalation

Ensure supply of fresh air. Remove affected person from the immediate area. Irregular breathing/no breathing: artificial respiration.

#### After skin contact

Wash off immediately with soap and water. Consult a doctor if skin irritation persists.

#### After eye contact

Remove contact lenses. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes). In case of irritation consult an ophthalmologist.

#### After ingestion

Rinse out mouth and give plenty of water to drink. Never give anything by mouth to an unconscious person. Do not induce vomiting. Call a doctor.

### 4.2 Most important symptoms and effects, both acute and delayed

No data available.

### 4.3 Indication of any immediate medical attention and special treatment needed

No data available.

## SECTION 5: Fire-fighting measures

### 5.1 Extinguishing media

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**Suitable extinguishing media**

Metal fire powders; Sand

**Unsuitable extinguishing media**

Water; Carbon dioxide

**5.2 Specific hazards arising from the chemical**

In the event of fire, the following can be released: Metal oxides

**5.3 Special protective equipment and precautions for fire-fighters**

Use self-contained breathing apparatus. Wear protective clothing. Do not allow run-off from fire fighting to enter drains or water courses.

**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures****For non-emergency personnel**

Refer to protective measures listed in sections 7 and 8. Ensure adequate ventilation. Avoid dust formation. Use personal protective clothing. Avoid contact with skin, eyes and clothing. Keep away from ignition sources.

**For emergency responders**

No data available. Personal protective equipment (PPE) - see Section 8.

**6.2 Methods and materials for containment and cleaning up**

Collect mechanically. Avoid raising dust. When collected, handle material as described under the section heading "Disposal considerations".

**SECTION 7: Handling and storage****7.1 Precautions for safe handling****Precautions for safe handling**

Provide good ventilation of working area (local exhaust ventilation if necessary). Risks inherent to handling the product must be minimised by applying appropriate protective and preventive measures. Working processes should - so far as possible, according to the state of the art - be designed to rule out bodily contact or the release of hazardous substances. Avoid the formation and deposition of dust.

**General protective and hygiene measures**

Wash hands before breaks and after work. Do not eat, drink or smoke during work time. Remove soiled or soaked clothing immediately. Keep away from food, drink and animal feeding stuffs. Do not inhale vapours or dust. Provide eye wash fountain in work area. Hold emergency shower available.

**Advice on protection against fire and explosion**

Dust can form an explosive mixture with air. Take precautionary measures against static charges. Keep away from sources of heat and ignition.

**7.2 Conditions for safe storage, including any incompatibilities****Technical measures and storage conditions**

Keep container tightly closed and dry in a cool, well-ventilated place.

**Requirements for storage rooms and vessels**

Containers which are opened must be carefully resealed and kept upright to prevent leakage. Always keep in containers of same material as the original.

**Incompatible products**

Do not store together with: Acids; Bases

**SECTION 8: Exposure controls / personal protection****8.1 Control parameters****Occupational exposure limit(s)**

No	Substance name	CAS no.
1	cobalt	7440-48-4
<b>ACGIH Threshold Limit Values</b>		
Cobalt and inorganic compounds, as Co		

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	TWA	0,02 (l)	mg/m <sup>3</sup>
	Skin resorption / sensibilisation		
	Remarks	DSEN; RSEN; A3; BEI	
<b>OSHA Permissible Exposure Limits (PELS)</b>			
Cobalt metal (as Co) dust and fume			
	TWA	0.1	mg/m <sup>3</sup>
<b>2</b>	<b>chromium</b>	<b>7440-47-3</b>	
<b>ACGIH Threshold Limit Values</b>			
Chromium			
	TWA	0,5 (l)	mg/m <sup>3</sup>
<b>OSHA Permissible Exposure Limits (PELS)</b>			
Chromium metal and insoluble salts (as Cr)			
	TWA	1	mg/m <sup>3</sup>
<b>3</b>	<b>Dust</b>		
<b>OSHA Permissible Exposure Limits (PELS)</b>			
Particulates not otherwise regulated (PNOR) Total dust			
	TWA	15	mg/m <sup>3</sup>
<b>OSHA Permissible Exposure Limits (PELS)</b>			
Particulates not otherwise regulated (PNOR) Respirable fraction			
	TWA	5	mg/m <sup>3</sup>
<b>4</b>	<b>molybdenum</b>	<b>7439-98-7</b>	
<b>ACGIH Threshold Limit Values</b>			
Molybdenum, as Mo, Metal and insoluble compounds			
	TWA	10 (l)	mg/m <sup>3</sup>
	Skin resorption / sensibilisation		
<b>ACGIH Threshold Limit Values</b>			
Molybdenum, as Mo, Metal and insoluble compounds			
	TWA	3 (R)	mg/m <sup>3</sup>
	Skin resorption / sensibilisation		

## 8.2 Exposure controls

### Appropriate engineering controls

Provide good ventilation of working area (local exhaust ventilation if necessary).

### Individual protection measures, such as personal protective equipment

#### Respiratory protection

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of dust formation, take appropriate measures for breathing protection in the event that workplace threshold values are not specified.

Respiratory filter (part): EN 143 - P3

#### Eye / face protection

Safety glasses (EN 166)

#### Hand protection

Sufficient protection is given wearing suitable protective gloves in the event of risk of skin contact with the product. Before use, the protective glove should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Appropriate Material butyl rubber  
Appropriate Material Nitrile butyl rubber

#### Other protection measures

Protective clothing

## SECTION 9: Physical and chemical properties

<b>Form/Color</b>
Powder
grey to black

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<b>Odor</b>	
No data available	
<b>Odor threshold</b>	
No data available	
<b>pH value</b>	
No data available	
<b>Boiling point / boiling range</b>	
No data available	
<b>Melting point / melting range</b>	
Value	1200 - 1550 °C
Source	supplier
<b>Decomposition point / decomposition range</b>	
No data available	
<b>Flash point</b>	
No data available	
<b>Auto-ignition temperature</b>	
No data available	
<b>Oxidising properties</b>	
No data available	
<b>Explosive properties</b>	
No data available	
<b>Flammability</b>	
No data available	
<b>Lower flammability or explosive limits</b>	
No data available	
<b>Upper flammability or explosive limits</b>	
No data available	
<b>Vapor pressure</b>	
No data available	
<b>Vapor density</b>	
No data available	
<b>Evaporation rate</b>	
No data available	
<b>Relative density</b>	
No data available	
<b>Density</b>	
No data available	
<b>Solubility in water</b>	
No data available	
<b>Solubility(ies)</b>	
No data available	
<b>Partition coefficient: n-octanol/water</b>	
No data available	
<b>Viscosity</b>	
No data available	
<b>Other information</b>	
Other information	

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No data available.

**SECTION 10: Stability and reactivity****10.1 Reactivity**

No data available.

**10.2 Chemical stability**

Stable under recommended storage and handling conditions(See section 7).

**10.3 Possibility of hazardous reactions**

None, when used as directed.

**10.4 Conditions to avoid**

Heat, open flames and other sources of ignition.

**10.5 Incompatible materials**

Acids; Bases

**10.6 Hazardous decomposition products**

Fumes of metal oxide

**SECTION 11: Toxicological information****Information on toxicological effects****Acute oral toxicity**

No data available

**Acute dermal toxicity**

No data available

**Acute inhalational toxicity**

No data available

**Skin corrosion/irritation**

No data available

**Serious eye damage/irritation**

No data available

**Respiratory or skin sensitisation**

No data available

**Germ cell mutagenicity**

No data available

**Reproduction toxicity**

No data available

**Carcinogenicity**

No data available

**NTP Report on Carcinogens (RoC)**

The product contains following substance(s) listed "known" (to be a human carcinogen) or "RAHC" (reasonably anticipated to be a human carcinogen)

No	Substance name	CAS no.	No
1	cobalt	7440-48-4	RAHC, RAHC

**OSHA Standards listing cancer as a health effect (Table VII.6.2)**

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substance(s) listed as carcinogenic.

**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans**

The product contains following substance(s) classified by the IARC Monographs

No	Substance name	CAS no.	Group
1	chromium	7440-47-3	3

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<b>2</b>	<b>cobalt</b>	<b>7440-48-4</b>	<b>2B, 2A</b>
<b>STOT - single exposure</b>			
No data available			
<b>STOT - repeated exposure</b>			
No data available			
<b>Aspiration hazard</b>			
No data available			
<b>Delayed and immediate effects as well as chronic effects from short and long-term exposure</b>			
Inhalation of vapours in high concentration may cause metal fume fever and may cause damage of the central nervous system in case of repeated and prolonged exposure. Repeated and prolonged exposure to high dust concentrations may lead to irritation of the respiratory tract. Inhalation of metal-containing dusts may cause acute poisoning, leading to nausea, vomiting and abdominal pain.			

## SECTION 12: Ecological information

### 12.1 Toxicity

<b>Toxicity to fish (acute)</b>
No data available
<b>Toxicity to fish (chronic)</b>
No data available
<b>Toxicity to Daphnia (acute)</b>
No data available
<b>Toxicity to Daphnia (chronic)</b>
No data available
<b>Toxicity to algae (acute)</b>
No data available
<b>Toxicity to algae (chronic)</b>
No data available
<b>Bacteria toxicity</b>
No data available

### 12.2 Persistence and degradability

No data available.

### 12.3 Bioaccumulative potential

No data available.

### 12.4 Mobility in soil

No data available.

### 12.5 Other adverse effects

No data available.

### 12.6 Other information

<b>Other information</b>
Do not discharge into drains or waters and do not dispose of in public landfills.

## SECTION 13: Disposal considerations

### 13.1 Disposal considerations

#### Product

Dispose in accordance with federal, state and local regulations.

#### Packaging

Residuals must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in accordance with federal, state and local regulations.

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## SECTION 14: Transport information

### 14.1 US DOT (Department of Transportation)

The product is not subject to DOT regulations.

### 14.2 Transport IMDG

The product is not subject to IMDG regulations.

### 14.3 Transport ICAO-TI / IATA

The product is not subject to ICAO-TI / IATA regulations.

### 14.4 Other information

No data available.

### 14.5 Environmental hazards

Information on environmental hazards, if relevant, pls. see 14.1 - 14.3.

### 14.6 Special precautions for user

No data available.

### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant

## SECTION 15: Regulatory information

### 15.1 US Federal Regulations

#### Toxic Substances Control Act (TSCA)

According to the data available and/or specifications supplied by upstream suppliers, all components of this product are on the TSCA Inventory listed as active or are exempted from notification requirements.

#### CERCLA (Comprehensive Environmental Response, Compensation and Liability Act)

The product contains following substance(s) that are considered being subject to Table 302.4 "List of Hazardous Substances and Reportable Quantities"

No	Substance name	CAS no.
1	chromium	7440-47-3
2	cobalt	7440-48-4

#### Clean Air Act (CAA): Hazardous Air Pollutants (HAPS)

The product contains following substance(s) that are considered being "Hazardous Air Pollutants".

No	Substance name	CAS no.
1	cobalt	7440-48-4

#### Clean Water Act (CWA) Section 307 (Toxic Pollutants) and Section 311 (Hazardous Substances)

The product contains following substance(s) that are considered to be "Hazardous Substances".

No	Substance name	CAS no.
1	chromium	7440-47-3

#### EPCRA SARA Section 313, Toxic Chemical Release Inventory

The product contains following substance(s) that are considered being subject to "SARA Reporting".

No	Substance name	CAS no.
1	chromium	7440-47-3
2	cobalt	7440-48-4

#### Emergency Planning & Community Right-to-Know Act (EPCRA) - Sections 302 and 304

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substance(s) that are considered being subject to reporting requirements.

#### Clean Air Act (CAA) - Section 602 Ozone depleting substances

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substance(s) listed as ozone depleting substance.

### 15.2 US State Regulations

#### Pennsylvania State Right to Know Hazardous Substance List



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The product contains following substance(s) that are considered to be "Hazardous Substances".		
No	Substance name	CAS no.
1	chromium	7440-47-3
2	cobalt	7440-48-4
3	molybdenum	7439-98-7
4	nitrogen	7727-37-9

New Jersey State Right to Know Hazardous Substance List		
The product contains following substance(s) that are considered to be "Hazardous Substances".		
No	Substance name	CAS no.
1	chromium	7440-47-3
2	cobalt	7440-48-4
3	molybdenum	7439-98-7
4	nitrogen	7727-37-9

Massachusetts State Right to Know Hazardous Substance List		
The product contains following substance(s) that are considered to be "Hazardous Substances".		
No	Substance name	CAS no.
1	chromium	7440-47-3
2	cobalt	7440-48-4
3	molybdenum	7439-98-7
4	nitrogen	7727-37-9

California Code of Regulations Title 8 §339, Hazardous Substances List		
The product contains following substance(s) that are considered to be "Hazardous Substances".		
No	Substance name	CAS no.
1	chromium	7440-47-3
2	cobalt	7440-48-4
3	molybdenum	7439-98-7

Right to Know - California State - Proposition 65			
The product contains following substance(s) that are considered to be "Hazardous Substances".			
No	Substance name	CAS no.	type of toxicity
1	cobalt	7440-48-4	cancer

## SECTION 16: Other information, including date of preparation or last revision

### 16.1 Other information

No data available.

### 16.2 Date of preparation/revision of the SDS

Current version	1.0.0	07.01.2025
Replaced version	-	-

### 16.3 Department issuing safety data sheet

UMCO GmbH - D-21107 Hamburg, Georg-Wilhelm-Strasse 187, Tel.: +49(40)555 546 300, Fax: +49(40)555 546 357, e-mail: umco@umco.de

### 16.4 Conclusions

This information is based on our present knowledge and experience.

The safety data sheet describes products with a view to safety requirements.

It does not, however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.

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Prod-ID 806197

### 16.5 Key / Legend

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5E - indicates a substance that is the subject of a TSCA section 5(e) order  
5F - indicates a substance that is the subject of a TSCA section 5(f) rule  
ACGIH - American Conference of Governmental Industrial Hygienists  
ATE – Acute Toxicity Estimate  
BOD - Biochemical Oxygen Demand  
CA/MA/MN/NJ/PA - California/Massachusetts/Minnesota/New Jersey/Pennsylvania\*;  
CAS - Chemical Abstracts Service  
CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act  
CFR - Code of Federal Regulations (US)  
CLP - Classification, Labelling, and Packaging  
DOT - Department of Transportation Commission  
ECHA – European Chemicals Agency  
EC / EL – Effective Concentration / Effective Loading  
EPA - Environmental Protection Agency  
IARC - International Agency for Research on Cancer  
IATA - International Air Transport Association  
IBC – Intermediate Bulk Container  
ICAO - International Civil Aviation Organization  
IDL - Ingredient Disclosure List  
IDLH - Immediately Dangerous to Life and Health  
IMDG - International Maritime Dangerous Goods  
IUCRID - International Uniform Chemical Information Database  
Kow - Octanol/water partition coefficient  
LD/LC - Lethal Dose/ Lethal Concentration  
MARPOL – Marine Pollution  
MEL - Maximum Exposure Limits  
NFPA - National Fire Protection Agency  
NIOSH - National Institute for Occupational Safety and Health  
NJTSR - New Jersey Trade Secret Registry  
NOEL/NOEC – No Observed Effect Level / No Observed Effect Concentration  
NTP - National Toxicology Program  
OSHA - Occupational Safety and Health Administration  
PEL- Permissible Exposure Limit  
PMN - indicates a commenced Pre Manufacture Notice substance  
RCRA - Resource Conservation and Recovery Act  
S - indicates a substance that is identified in a final Significant New Use Rule  
SARA - Superfund Amendments and Reauthorization Act  
SP - indicates a substance that is identified in a proposed Significant New Use Rule  
STEL - Short-term Exposure Limit  
STOT – Specific Target Organ Toxicity  
T - indicates a substance that is the subject of a final TSCA section 4 test rule or order  
TDG - Transportation of Dangerous Goods  
TLV - Threshold Limit Value  
TP - indicates a substance that is the subject of a proposed TSCA section 4 test rule or order  
TSCA - Toxic Substances Control Act  
TWA - Time Weighted Average  
UN/NA - United Nations /North American  
US - United States  
VLE - Exposure Limit Value (Mexico)  
VOC – Volatile Organic Compounds  
XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule