

**MATERIAL SAFETY DATA SHEET (EC 1907/2006)**

Material name

**Neoss MSDS 9 - COBALT CHROMIUM**Document no  
**11028**Version  
**0**Date  
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**1 of 3****SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

Trade name	Cobalt Chromium
Company	Neoss Ltd. Windsor House Cornwall road Harrogate, HG1 2PW <a href="http://www.neoss.com">www.neoss.com</a>
Telephone	+44 1423 817-733
Telefax	+44 1423 817-744
Email	<a href="mailto:info@neoss.com">info@neoss.com</a>
Emergency telephone number	Your local Neoss office
Use of the Substance /Preparation	Production of machined parts

**SECTION 2: COMPOSITION/ INFORMATION ON INGREDIENT**

Ingredients	CAS#	%	PEL (Permission Exposure Limits), TLV (Threshold Limit Values) 8 hour time weighted averages, C (Ceiling)	
			PEL	TLV
Cobalt	7440-48-4	65	0.1 mg/mm <sup>3</sup>	0.02 mg/mm <sup>3</sup>
Chromium	7440-47-3	27.5	0.5 mg/mm <sup>3</sup>	0.5 mg/mm <sup>3</sup>
Molybdenum	7439-98-7	5.5	5 mg/mm <sup>3</sup> (SOL)	10 mg/mm <sup>3</sup> (INSOL)
Manganese	7439-96-5	0.7	5 mg/mm <sup>3</sup> (SOL)	0.2 mg/mm <sup>3</sup>
Iron	1309-37 1 *	0.5	10 mg/mm <sup>3</sup> C	5 mg/mm <sup>3</sup>
Nickel	7440-02-0	<0.1	1 mg/mm <sup>3</sup>	1 mg/mm <sup>3</sup>

\* Substance regulated in oxide form

The above percentage concentrations are presented for industrial hygiene purposes; they do not represent a certification of content.

**SECTION 3: HAZARDS IDENTIFICATION****Additional safety information for humans and the environment**

cobalt - vapour is released during processing.

May cause cancer.

May release metal vapours when melting.

Do not breathe Dusts and vapours:.

Experience with human beings:

To date handling this product has not been known to cause any detrimental effects. on their processing of the product.

**SECTION 4: FIRST AID MEASURES****General Information**

Under normal conditions, contact with this product in massive form is unlikely to cause a health hazard and the component elements are generally regarded as non-toxic.

**Inhalation:**

Remove person from exposure to fresh air. If breathing difficulty occurs, get prompt medical attention.

**Skin/ Eye Contact:**

Flush eye with plenty of water for 15 minutes, seek medical attention if irritation persists.

Wash skin with soap and water, if rash develops, seek medical attention.

**Ingestion:**

Seek medical attention.



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### SECTION 5: FIRE-FIGHTING MEASURES

**Suitable extinguishing media:**

All extinguishing substances suitable.

**Special protective equipment for fire fighters:**

No special protective equipment required.

**Further information:**

The product itself does not burn.

Adapt fire extinguishing methods to site.

### SECTION 6: ACCIDENTAL RELEASE MEASURES

**Land/ Water spills:** As shipped, this product does not pose a hazard to the environment.

### SECTION 7: HANDLING AND STORAGE

#### Handling

**When melting, soldering and grinding:**

Local ventilation.

**Do not breathe Dusts and vapours:**

No particular measures required if used correctly.

**If occurs dust / vapour:**

Wear personal protective equipment

#### Storage

**Storage Temperature:** Not applicable

**Storage Pressure:** Not applicable

**General:** Store away from acids and oxidizers

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Engineering Controls:

The use of local exhaust ventilation is recommended to control emissions near the source of metal being cut, ground welded or melted.

#### Personal Protection:

When handling the steel product, leather gloves are recommended. Additional personal protective equipment is dependent on the operation performed, for example safety glasses and a face shield when grinding the product.

If industrial hygiene monitoring reveals an overexposure during the processing of the product, engineering controls are required to be installed to reduce exposures below OSHA permissible exposure limits. In the absence of feasible engineering controls, wear a NIOSH approved respirator for protection for the type of particulate generated.

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**Melting Point:** 1315-1540 °C (2400–2800 °F)

**Odour:** Odourless

**Appearance:** Grey in colour

**Physical State:** Solid

### SECTION 10: STABILITY AND REACTIVITY

**General:** Product is stable

**Incompatible Materials and Conditions to Avoid:** Acids, bases and oxidizers.

**Hazardous Decomposition:** decomposition products if heated above melting point. Metallic vapours

### SECTION 11: TOXICOLOGICAL INFORMATION

#### Further information

No dangerous reactions are known to occur with correct handling and storage.

**Cobalt (dusts and vapours):** Clues to possible carcinogenic effects in animal experiments. literature

#### Human experience

To date handling this product has not been known to cause any detrimental effects.



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### SECTION 12: ECOLOGICAL INFORMATION

#### Data on Elimination

Scrap into containers suitable for reclamation or recovery.

### SECTION 13: DISPOSAL CONSIDERATIONS

**General:** Recycling of all metallic by-products as scrap is strongly encouraged. If by-products need to be treated and/ or disposed of as wastes, hazardous waste characterizations must be performed prior to treating and/ or disposing. Contact appropriate parties to ensure compliance with all federal, state and local rules and regulations related to waste treatment and disposal.

### SECTION 14: TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations

### SECTION 15: REGULATORY INFORMATION

#### Labelling According To EC-Regulations

Other data According to the Dangerous Preparations Directive (1999/45/EG): no labelling

### SECTION 16: OTHER INFORMATION

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is given in good faith being based on the latest information available and is to the best and belief accurate and reliable at the time of preparation. However no representation, warranty or guarantee is made as to its accuracy, reliability or completeness and we assume no responsibility and disclaims any liability incurred in using this information. The product is supplied under condition that the user accepts the responsibility to satisfy himself so as to the suitability and completeness of such information for his own particular use.