

Section 1. Identification**1.1 Product Identifier** 1699

Product Name COBALT METAL POWDER

CAS Number 7440-48-4

REACH Registration No A registration number is not available as the substance or its uses are exempt, the annual tonnage does not require a registration or the registration is envisaged for a later date.

Molecular Formula $Co = 58.933$ **1.2 Relevant identified uses of the substance or mixture & uses advised against**

Uses of Material Chemical for industrial and laboratory use. Not suitable for domestic use.

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(Have this document to hand)**Section 2. Hazards Identification****2.1 Classification of the substance or mixture****Classification according to regulation 1272/2008/EC**

Flammable solid, category 1

H228: Flammable solid.

Respiratory sensitization, category 1

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin sensitization, category 1

H317: May cause an allergic skin reaction.

Hazard to aquatic environment, category 4

H413: May cause long lasting harmful effects to aquatic life.

2.2 Label elements**Labelling according to regulation 1272/2008/EC**

Signal word Danger

Hazard Pictograms



Hazard Statements Flammable solid. May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause long lasting harmful effects to aquatic life.

Precautionary Statements Keep away from heat / sparks/open flames/hot surfaces - No smoking. Ground/bond container and receiving equipment. Avoid breathing dust / fume / gas / mist / vapours / spray. In case of inadequate ventilation wear respiratory protection. IF ON SKIN: Wash with plenty of soap and water. Wear protective gloves / protective clothing / eye protection / face protection.

Section 3. Composition

3.1 Substances

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Cobalt metal powder	7440-48-4	231-158-0		>99%	Flam. Sol. 1, Resp. Sens. 1, Skin Sens. 1, Aquatic Chronic 4

Section 4. First Aid

4.1 Description of first aid measures

Eyes	Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. If discomfort persists OBTAIN MEDICAL ATTENTION.
Skin	Wash off skin thoroughly with water. If discomfort persists OBTAIN MEDICAL ATTENTION.
Inhalation	Remove from exposure.
Ingestion	Wash out the patients mouth thoroughly with water. In severe cases or if exposure has been great, OBTAIN MEDICAL ATTENTION.
Personal protection for first aiders	Wear protective gloves / eye protection.

4.2 Most important symptoms and effects, both acute & delayed.

No further relevant information available.

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

No further relevant information available.

Section 5. Fire Fighting

5.1 Extinguishing media

Extinguishing Media	Consider what other flammable materials are present and act accordingly.
Unsuitable Media	Nothing specified.

5.2 Special hazards arising from the substance or mixture

Hazards	Presents no specific fire danger.
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5.3 Advice for firefighters

Advice for firefighters	Consider all other materials in the vicinity.
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Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection	Presents no major hazards.
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6.2 Environmental precautions

Environmental

Keep material out of sewers, storm drains, surface waters and soil. Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs.

6.3 Methods and material for containment and cleaning up

Major Spillage Shovel/sweep up into container for removal Wash area down with copious amounts of water.
Minor Spillage Shovel/sweep up into container for removal Wash area down with copious amounts of water.

6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

Section 7. Storage & Handling

7.1 Precautions for safe handling

No specific precautions.

7.2 Conditions for safe storage, including any incompatibilities

Well ventilated, cool, dry storage .

7.3 Specific end use(s)

See section 1.2.

Section 8. Workplace Exposure & Personal Protection

8.1 Control parameters

Component	CAS No	Concentration	Workplace Exposure Limits		
			Long Term (8hr TWA)	Short Term 15min period	
Cobalt metal powder	7440-48-4	>99%	-	0.1 mg/m-3	-

Exposure data source(s) IOELV: Indicative Occupational Exposure Limit Value.

8.2 Exposure controls

Respiratory Protection Ensure Local Exhaust Ventilation maintains dust concentrations below the recommended limits.
Hand Protection Wear gloves.
Eye Protection Use tightly fitting chemical splash proof glasses or goggles.
Skin Protection Avoid contact with skin.
Special Hazards No special precautions required.

Section 9. Physical & Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance Silver-grey metallic granules.
Odour No specific odour.
pH Not applicable
Boiling Point 2900°C
Melting Point 1493°C
Flash Point Not applicable
Upper Flammable Limit Not applicable
Lower Flammable Limit Not applicable
Auto Ignition Not applicable
Explosive Properties No.
Oxidising Properties No.
Vapour Pressure Not applicable
Relative Density 8.9 @ 25°C
Water Solubility Not available

9.2 Other information

No data available.

Section 10. Stability & Reactivity

10.1	Reactivity	No data available.
10.2	Chemical Stability	Stable under normal conditions
10.3	Possibility of hazardous reactions	No data available.
10.4	Conditions to Avoid	No specific conditions.
10.5	Incompatible Materials	No specific materials to avoid.
10.6	Hazardous Decomposition Products	None.

Section 11. Toxicological Information

11.1 Information on toxicological effects

Eyes	There may be mild irritation at the site of contact.
Skin	Allergic skin reactions may occur from contact.
LD50 Skin	Not available
Ingestion	Low order of acute toxicity.
LD50 Oral	6171 Rat
Inhalation	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
LD50 Inhalation	Not available
TCLo	Not available
Carcinogenicity	Limited evidence of carcinogenic effect.
Mutagenicity	None identified.
Reproductive Effects	None identified.

Section 12. Ecological

12.1	Toxicity	May cause long term adverse effects in the aquatic environment.
	LC50 Algal	Not available
	LC50 Crustacea	Not available
	LC50 Fish	Not 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	Results of PBT & vPvB assessment	Assessment not required.
12.6	Other adverse effects	None known at present.

Section 13. Disposal Considerations

13.1 Waste treatment methods

Disposal Methods	Dispose of via an authorised waste disposal contractor to an approved waste disposal site, observing all local and national regulations.
Contaminated Packaging	Use a licensed waste disposer.

Section 14. Transport Information

14.1 UN Number	3089
14.2 Proper Shipping Name	Metal powder, flammable, N.O.S.
14.3 Transport classes	
UN classification	4.1
Subsidiary hazard(s)	None
Transport category	2
ADR Hazard ID	40
Tunnel Restriction Code	E
14.4 Packing Group	II
14.5 Environment hazards	See section 12.
14.6 Special precautions for user	No special precautions required.
14.7 Transport in bulk	Not transported in bulk.



Section 15. Regulatory Information

15.1 Safety, health and environment regulations specific for substance/mixture.

Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)

Classification Flammable solid, category 1; Respiratory sensitization, category 1; Skin sensitization, category 1; Hazard to aquatic environment, category 4

Signal word Danger

Hazard Pictograms



Hazard Statements H228, H317, H334, H413
Flammable solid. May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause long lasting harmful effects to aquatic life.

Precautionary Statements P210, P240, P261, P285, P302+P352, P280
Keep away from heat / sparks/open flames/hot surfaces - No smoking. Ground/bond container and receiving equipment. Avoid breathing dust / fume / gas / mist / vapours / spray. In case of inadequate ventilation wear respiratory protection. IF ON SKIN: Wash with plenty of soap and water. Wear protective gloves / protective clothing / eye protection / face protection.

15.2 Chemical safety assessment

Assessment not required.

Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

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