



MATERION

SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Identification of the substance/preparation	Cobalt oxide (CoO)
Version No.	02
Issue date	16-April-2015
Revision date	23-April-2015
CAS #	1307-96-6
Materion Code	C-MSDS0061
Manufacturer information	Materion Advanced Chemicals Inc. 407 N. 13th Street 1316 W. St. Paul Avenue Milwaukee, WI 53233 United States advancedmaterials@materion.com 414.212.0257

2. HAZARDS IDENTIFICATION

Classification	Xn;R22, R43, N;R50/53
Physical hazards	Not classified as a physical hazard.
Health hazards	Harmful if swallowed. May cause sensitisation by skin contact.
Environmental hazards	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS #	Percent	EC-No.	Classification
Cobalt Oxide	1307-96-6	100	215-154-6	Xn;R22, R43, N;R50/53

4. FIRST-AID MEASURES

5. FIRE-FIGHTING MEASURES

6. ACCIDENTAL RELEASE MEASURES

7. HANDLING AND STORAGE

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits

US. ACGIH Threshold Limit Values

Material	Type	Value
Cobalt Oxide (CAS 1307-96-6)	TWA	0,02 mg/m ³

Biological limit values

ACGIH Biological Exposure Indices

Material	Value	Determinant	Specimen	Sampling time
Cobalt Oxide (CAS 1307-96-6)	15 µg/l	Cobalt	Urine	*
	1 µg/l	Cobalt	Blood	*

* - For sampling details, please see the source document.

Recommended monitoring procedures

Additional exposure data Not available.

Personal protective equipment

Skin and body protection Not available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical state	Solid.
Form	Not available.
Colour	Not available.
Odour	Not applicable.
Odour threshold	Not applicable.
pH	Not applicable.
Boiling point	Not available.
Flash point	Not available.
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Vapour pressure	< 0 kPa at 25 °C
Relative density	Not applicable.
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Viscosity	Not available.
Vapour density	Not applicable.
Evaporation rate	Not available.
Melting point/freezing point	1935 °C (3515 °F)
Auto-ignition temperature	Not available.
VOC	Not available.
Molecular weight	74,93 g/mol
Molecular formula	Co-O
Other data	
Density	5,70 g/cm3 estimated
Specific gravity	5,7 - 6,7

10. STABILITY AND REACTIVITY

Conditions to avoid	Not available.
Hazardous decomposition products	Not available.

11. TOXICOLOGICAL INFORMATION

Toxicological data

Product	Species	Test results
Cobalt Oxide (CAS 1307-96-6)		
Acute		
<i>Oral</i>		
LD50	Rat	202 mg/kg
<i>Other</i>		
LD50	Mouse	125 mg/kg

Carcinogenicity

IARC Monographs. Overall Evaluation of Carcinogenicity

Cobalt Oxide (CAS 1307-96-6)

2B Possibly carcinogenic to humans.

12. ECOLOGICAL INFORMATION

13. DISPOSAL CONSIDERATIONS

14. TRANSPORT INFORMATION

ADR

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not available.

15. REGULATORY INFORMATION

Labeling

Contains Cobalt Oxide

EC Number 215-154-6

Symbol(s)



Harmful



Dangerous for the environment

R-phrases(s)

R22 Harmful if swallowed.
R43 May cause sensitisation by skin contact.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrases(s)

S2 Keep out of the reach of children.
S24 Avoid contact with skin.
S37 Wear suitable gloves.
S60 This material and its container must be disposed of as hazardous waste.
S61 Avoid release to the environment. Refer to special instructions/ Safety data sheets.

16. OTHER INFORMATION

Wording of the R-phrases in sections 2 and 3

R22 Harmful if swallowed.
R43 May cause sensitisation by skin contact.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.