



SAFETY DATA SHEET

MATERION

1. Identification

GHS product identifier **Cobalt oxide (CoO)**
Materion Code C-MSDS0061
Version No. 01
Issue date 16-April-2015
CAS # 1307-96-6
Recommended use Not available.
Recommended Restrictions Not available.
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

GHS classification
Physical hazards Not classified.
Health hazards Acute toxicity, oral Category 3
Sensitization, skin Category 1
Carcinogenicity Category 2
Environmental hazards Hazardous to the aquatic environment, acute hazard Category 1
Hazardous to the aquatic environment, long-term hazard Category 1

GHS label elements
Hazard symbols None.
Other hazards which do not result in classification None known.
Supplemental information None.

3. Composition/information on ingredients

Components	CAS #	Percent
Cobalt Oxide	1307-96-6	100

4. First aid measures

First aid procedures
Inhalation Not available.
Skin Not available.
Eye Not available.
Ingestion Not available.
Most important symptoms and effects, both acute and delayed Not available.
Notes to physician Not available.

5. Fire-fighting measures

Suitable extinguishing media Not available.
Specific hazards arising from the chemical Not available.

Protective equipment and precautions for firefighters Not available.

6. Accidental release measures

Personal precautions Not available.

Environmental precautions Not available.

Methods for containment Not available.

Methods for cleaning up Not available.

7. Handling and storage

Handling Not available.

Storage Not available.

8. Exposure controls / personal protection

Control parameters

US. ACGIH Threshold Limit Values

Material	Type	Value
Cobalt Oxide (CAS 1307-96-6)	TWA	0.02 mg/m3

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 Not available.

Personal protective equipment

Eye/face protection Not available.

Skin protection Not available.

Respiratory protection Not available.

9. Physical and chemical properties

Appearance

Physical state Solid.

Odour Not applicable.

Odour threshold Not applicable.

pH Not applicable.

Melting point/freezing point 1935 °C (3515 °F)

Boiling point Not available.

Flash point Not available.

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Flammability limits in air, lower, % by volume Not available.

Flammability limits in air, upper, % by volume Not available.

Vapour pressure < 0 kPa at 25 °C

Vapour density Not applicable.

Relative density Not applicable.

Solubility(ies)

Solubility (water) Not applicable.

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity	Not available.
Specific gravity	5.7 - 6.7
Molecular weight	74.93 g/mol
Molecular formula	Co-O
Density	5.70 g/cm ³ estimated

10. Stability and reactivity

Chemical stability	Not available.
Possibility of hazardous reactions	Not available.
Conditions to avoid	Not available.
Incompatible materials	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

Skin corrosion/irritation Not available.

Serious eye damage/eye irritation Not available.

Carcinogenicity

ACGIH Carcinogens

Cobalt Oxide (CAS 1307-96-6)

A3 Confirmed animal carcinogen with unknown relevance to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

Cobalt Oxide (CAS 1307-96-6)

2B Possibly carcinogenic to humans.

Specific target organ toxicity - single exposure Not available.

Specific target organ toxicity - repeated exposure Not available.

12. Ecological information

13. Disposal considerations

Disposal methods Not available.

14. Transport information

ADR

Not regulated as dangerous goods.

RID

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

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information