

COBALT (II) OXIDE, EXTRA PURE

SECTION 1: CHEMICAL PRODUCT IDENTIFICATION

Product Name: COBALT (II) OXIDE, EXTRA PURE

Product Code: 1804

CAS#: 1308-06-1

Chemical Name: Not available

Chemical Formula: Co_3O_4

Molecular Weight: 240.80

SECTION 2: COMPOSITION AND INFORMATION ON INGREDIENTS

Composition:

Name: COBALT (II) OXIDE, EXTRA PURE

Chemical Formula: Co_3O_4

Molecular Weight: 240.80

SECTION 3: HAZARDS IDENTIFICATION

Classification of the substance or mixture: Respiratory sensitization (Category 1), H334

Carcinogenicity, Inhalation (Category 1A), H350i

Long-term (chronic) aquatic hazard (Category 3), H412

Other hazards: This substance/mixture contains no components considered to be either persistent, bio accumulative and toxic (PBT), or very persistent and very bio accumulative (vPvB) at levels of 0.1% or higher

SECTION 4: FIRST AID MEASURES

Eye Contact: Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Get medical attention immediately.

Skin Contact: immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Thoroughly clean clothes and shoes before reuse.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

SECTION 5: FIRE AND EXPLOSION DATA

Extinguishing media

Suitable extinguishing media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment

Unsuitable extinguishing media For this substance/mixture no limitations of extinguishing agents are given

Special hazards Cobalt/cobalt oxides Not combustible. Ambient fire may liberate hazardous vapors

Advice for firefighters Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Advice for non-emergency personnel: Avoid generation and inhalation of dusts in all circumstances. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, and consult an expert.

Environmental precautions No special precautionary measures necessary



Methods and materials for containment and cleaning up Observe possible material restrictions Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

SECTION 7: HANDLING AND STORAGE

Precautions: Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label.

Storage: Store in cool place Keep container tightly closed in a dry and well-ventilated place

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye/face protection Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

Skin protection This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances.

Body Protection protective clothing

Respiratory protection: required when dusts are generated Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance Form	: Dark green to black crystalline powder
Colour	: Not available
Odour	: Not available
Odour Threshold	: Not available
pH	: Not available
Melting point/freezing point	: Not available
Initial boiling point and boiling range	: Not available
Flash point	: Not available
Evaporation rate	: Not available
Flammability (solid, gas)	: Not available
Upper/lower flammability or explosive limits	: Not available
Relative density	: Not available
Water solubility	: Not available
Partition coefficient	: Not available
Auto-ignition temperature	: Not available

SECTION 10: STABILITY AND REACTIVITY DATA

Reactivity: No data available

Chemical stability Stable under recommended storage conditions

Possibility of hazardous reactions No data available

Conditions to avoid Avoid moisture. no information available

Incompatible materials Reducing agents

SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity: LD50 Oral - Rat - > 5.000 mg/kg (OECD Test Guideline 401) LC50 Inhalation - Rat - 4 h - > 4,83 mg/l - dust/mist (OECD Test Guideline 403) LD50 Dermal - Rat - > 2.000 mg/kg (OECD Test Guideline 402)



Skin corrosion/irritation: Skin - Rabbit Result: No skin irritation (OECD Test Guideline 404)
Serious eye damage/eye irritation Eyes - Rabbit Result: No eye irritation (OECD Test Guideline 405)
Respiratory or skin sensitization May cause allergy or asthma symptoms or breathing difficulties if inhaled. (ECHA)
Reproductive toxicity No data available
Specific target organ toxicity - single exposure No data available
Specific target organ toxicity - repeated exposure No data available

SECTION 12: ECOLOGICAL INFORMATION

Toxicity: Toxicity to fish LC50 - Danio rerio (zebra fish) - > 136 mg/l - 96 h (OECD Test Guideline 203) Remarks: (above the solubility limit in the test medium)
 Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - > 136 mg/l - 48 h (OECD Test Guideline 202) Remarks: (above the solubility limit in the test medium)
 Toxicity to algae IC50 - Pseudokirchneriella subcapitata (green algae) - 88 mg/l - 72 h (OECD Test Guideline 201)
Persistence and degradability: The methods for determining the biological degradability are not applicable to inorganic substances.
Bio accumulative potential: No data available
Mobility in soil: No data available
Results of PBT and vPvB assessment: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods Waste must be disposed of in accordance with federal, state and local environmental control regulations.

SECTION 14: TRANSPORT INFORMATION

UN number:		
ADR/RID:	IMDG:	IATA:
UN proper shipping name		
ADR/RID: Not dangerous goods		
IMDG: Not dangerous goods		
IATA: Not dangerous goods		
Transport hazard class(es):		
ADR/RID:	IMDG:	IATA:
Packaging group:		
ADR/RID:	IMDG:	IATA:
Environmental hazards:		
ADR/RID: No	IMDG Marine pollutant: No	IATA: No

SECTION 15: OTHER REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture: This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

SECTION 16: OTHER INFORMATION

References: Full text of H AND R-Statements:
 H317 May cause an allergic skin reaction.
 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.



H350i May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H372 Harmful to aquatic life with long lasting effects.
H412 May cause cancer by inhalation.
H413 Causes damage to organs through prolonged or repeated exposure if inhaled.

Other Special Considerations: Not available

The information contained in this data sheet represents the best information currently available to us. However, no warranty is made with respect to its completeness and we assume no liability resulting from its use. The information is offered solely for user's obligation to investigate and determine the suitability of the information for their particular purpose.

