

SAFETY DATA SHEET

Cobalt Oxide

Revision of
February, 2005Ceramic Color & Chemical Mfg. Co.
P.O. BOX 297
New Brighton, PA 15066
Ph: 724-846-4000 Fax: 724-846-4123**HAZARDOUS INGREDIENTS**

Hazardous Ingredients	Calculated Composition	C.A.S. No.	PEL ¹ -mg/m ³	TLV ² -mg/m ³
Cobalto-Cobaltic Oxide (Co ₃ O ₄)	86-93	1308-06-1	0.05 as Co	0.05 as Co
Cobaltous oxide (CoO)	7-13	1307-96-6	0.05 as Co	0.05 as Co
Nickel Oxide (NiO)	0.1-1	1313-99-1	1 as Ni	1 as Ni

PHYSICAL and CHEMICAL DATA

Black, odorless powder of which 98% passes through a 350 mesh sieve.

Ingredient	Mol. Wt.	Specific Gravity	m.p. °C	b.p. °C	Sol. In H ₂ O g/100ml
Co ₃ O ₄	240.8	6.07	n.av.	n.av.	0
CoO	74.93	6.45	1935	n.av.	0
NiO	74.71	6.67	1990	n.av.	0

PHYSICAL HAZARDS

None

The inhalation of nickel oxide has not resulted in an increased incidence of malignant lung tumors in rodents.

Inhalation of nickel oxide at concentrations 50 times the PEL, produced pneumoconiosis in hamsters.

Repeated intratracheal instillation of nickel oxide produced an increased incidence of malignant lung tumors in rats

Wounds: Nickel oxide has caused tumors at the site of injection in rodents.

Ingestion: The U.S. National Institute for Occupational Safety and Health (NIOSH) concluded there is no evidence that Nickel and its inorganic compounds are carcinogenic when ingested.

PRECAUTIONS FOR SAFE STORAGE, HANDLING AND USE

Do not inhale powder. Keep container closed when not in use. Ventilation is normally required when handling or using this product to keep exposure to airborne nickel below the exposure limit. If ventilation alone cannot so control exposure, use NIOSH-approved respirators selected according to OSHA 29 CFR 1910.134. Maintain airborne nickel levels as low as possible.

SPILL, LEAK AND DISPOSAL PROCEDURE

Collect spills by using sweeping compound or by vacuuming with the vacuum exhaust passing through a high efficiency particulate arresting (HEPA) filter if the exhaust is discharged into the workplace.

Wear appropriate NIOSH-approved respirators if collection and disposal of spills is likely to cause the concentration of airborne contaminants to exceed their exposure limits.

- Eye Contact:** May cause eye irritation.
- Wounds:** A chemical alleged to be nickel carbonate but which was probably a basic nickel carbonate and dried crystalline nickel hydroxide caused tumors at the site of injection in rodents.
- Ingestion:** The U.S. National Institute for Occupational Safety and Health (NIOSH) concluded there is no evidence that nickel and its inorganic compounds are carcinogenic when ingested.

PRECAUTIONS FOR SAFE STORAGE, HANDLING AND USE

Do not inhale. Keep container closed when not in use. Ventilation is normally required when handling or using this product to keep exposure to airborne nickel below the exposure limit. If ventilation alone cannot so control exposure, use NIOSH-approved respirators selected according to OSHA 29 CFR 1910.134. Maintain the airborne concentration of nickel oxide as low as possible.

SPILL, LEAK AND DISPOSAL PROCEDURE

Collect spills by wet sweeping or by vacuuming with the vacuum exhaust passing through a high efficiency particulate arresting (HEPA) filter if the exhaust is discharged into the workplace.

Wear appropriate NIOSH-approved respirators if collection and disposal of spills is likely to cause the concentration of airborne contaminants to exceed the exposure limits.

Nickel-containing waste is normally collected to recover nickel values. Should waste disposal be deemed necessary, follow EPA and local regulations.

EMERGENCY AND FIRST AID PROCEDURES

Cleanse wounds thoroughly to remove any particles.

SARA SECTION 313 SUPPLIER NOTIFICATION

This product contains the following chemical(s) subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 and of 40 CFR 372:

Nickel Oxide
Basic Nickel Carbonate

Refer to the Hazardous Ingredients section of this MSDS for the appropriate CAS numbers and the percent by weight.

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CCC believes that the information in this Material Safety Data Sheet is accurate. However, CCC makes no express or implied warranty as to the accuracy of such information and expressly disclaims any liability resulting from reliance on such information.