



OMG AMERICAS, INC.
811 SHARON DRIVE
WESTLAKE, OHIO 44145

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 76% NICKEL OXIDE

PRODUCT CODE NO: 575

MANUFACTURING LOCATION:

OMG AMERICAS, INC.
TWO MILE RUN ROAD
VENANGO COUNTY, FRANKLIN, PA 16323

DATE REVISED: 02/05/1998
DATE PRINTED: 05/05/1998

IN CASE OF EMERGENCY CONTACT:

8:00 a.m. to 5:00 p.m. (EST): 440-899-2950
After 5:00 p.m.(EST): 814-432-2125

CHEMICAL FAMILY/USE: Inorganic salt
CHEMICAL FORMULA: NA

HMS: HEALTH: 1*
FLAMMABILITY: 0
REACTIVITY: 0
PERSONAL PROTECTION: E

*Chronic health hazard

2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>PRODUCT</u> <u>CAS REG NO.</u>	<u>COMPOSITION/APPROX.</u> <u>WGT. %</u>	<u>ACGIH TLV</u>		<u>OSHA PEL</u>		<u>UNITS</u>
		<u>TWA</u>	<u>STEL</u>	<u>TWA</u>	<u>STEL</u>	
Nickel Oxide 1313-99-1	>99	1**	NE	1	NE	mg/m3

**For Nickel, Insoluble compounds, as Ni

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

Nickel dust or fume can cause sensitization dermatitis and may cause cancer of the paranasal sinuses and the lungs. Nickel fumes are respiratory irritants and may cause pneumonitis. Skin contact may cause an allergic skin rash. Material causes eye irritation. Avoid contact with eyes, skin and clothing. Dust from handling can cause irritation of nose and throat. Prolonged exposure could cause serious respiratory illness and lung damage. Sensitized persons may develop wheezing and shortness of breath. Avoid breathing dust. Wash thoroughly after handling. Keep container closed. Use with adequate ventilation.

EYE CONTACT:

May cause serious eye irritation.

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SKIN CONTACT:

May cause allergic reactions. May cause sensitization by skin contact.

INGESTION:

No known adverse effects.

INHALATION:

Prolonged inhalation of nickel dust, or metal dust, fume or mist containing nickel may cause serious respiratory illness. There are references in the literature associating nickel with interstitial fibrosis, a disease which can be fatal. Inhalation may cause an irritation of respiratory organs of sensitive persons resulting in obstruction of airways with shortness of breath.

4. FIRST AID MEASURES

EYES:

Immediately flush with large amounts of water and continue flushing until irritation subsides.

SKIN:

Wash thoroughly with soap and plenty of clean water. If irritation occurs, contact a physician.

INHALATION:

In case of inhalation of nickel dust, fume or mist, remove from exposure. If necessary give oxygen, contact a physician.

INGESTION:

In case of ingestion and if conscious, induce vomiting. Contact a physician.

MEDICAL CONDITIONS AGGRAVATED:

Chronic respiratory and skin diseases may be aggravated by exposure to this material.

NOTE TO PHYSICIAN:

None known.

5. FIRE FIGHTING MEASURES

FLASH POINT (° F)

Not Applicable

OSHA FLAMMABILITY CLASSIFICATION:

Not Applicable.

EXTINGUISHING MEDIA:

Not applicable. Product does not burn.

SPECIAL FIREFIGHTING PROCEDURES:

None required; however, when fighting chemical fires, self-contained breathing apparatus and protective clothing is recommended.

EXPLOSION LIMITS IN AIR - LOWER (%) Unknown

EXPLOSION LIMITS IN AIR - UPPER (%) Unknown

AUTOIGNITION TEMP (° F) Unknown

UNUSUAL FIRE AND EXPLOSION HAZARDS:

High concentrations of dust may present a dust explosion hazard.

6. ACCIDENTAL RELEASE MEASURES

ACTION TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

The spill should first be contained and the area should be cleaned by wet-sweeping or vacuum cleaning (HEPA filter). Minimize the creation of dust. Approved NIOSH respirator for dust should be worn.

ADDITIONAL ACTION IF MATERIAL IS SPILLED ONTO SURFACE WATER BODIES:

The California Safe Drinking Water and Toxic Enforcement Act of 1986 (Prop 65) prohibits contaminating any known source of drinking water with substances known to cause cancer and/or reproductive toxicity.

7. HANDLING AND STORAGE

HANDLING:

Avoid contact with skin and eyes. Avoid breathing dust. Use only with adequate ventilation. Always use gloves and safety glasses when opening/emptying containers or processing this material. Do not eat or drink in work area. Wash in soap and water after exposure to any dust.

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STORAGE:

Partly used containers should be sealed. This material should be stored in sealed containers to avoid dampness and dust.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:

Proper ventilation should be installed in order to maintain nickel dust concentration in the air below the occupational exposure limits.

RESPIRATORY PROTECTION EQUIPMENT:

Use NIOSH approved respiratory protection where airborne level exceeds appropriate occupational exposure limit.

PROTECTIVE GLOVES:

Gloves, rubber or impervious coating.

EYE AND FACE PROTECTION:

Wear safety glasses or face shield in operations that do scatter fine particles in the air.

OTHER PROTECTIVE EQUIPMENT:

To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

VENTILATION:

Use local exhaust ventilation directed towards the source of dust and which is adequate to limit personal exposure to levels which do not exceed the PEL or TLV. If such equipment is not available use respirators as specified above.

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Range/Point	Not Applicable
Vapor Pressure	Not Applicable
Vapor Density (AIR=1)	Not Applicable
Freezing Point	Unknown
Melting Point	Unknown
Physical State	Powder
Color	Black
% Volatile by Weight	0
% Volatile by Volume	Not Applicable
Evaporation Rate (Butyl Acetate=1)	Not Applicable
Specific Gravity @ 25°C	1.0 g per cubic centimeter
Weight per gallon	8.3 lbs.

10. STABILITY AND REACTIVITY

STABILITY:

Stable.

HAZARDOUS POLYMERIZATION:

Will not occur.

HAZARDOUS THERMAL DECOMPOSITION/COMBUSTION PRODUCTS:

Toxic fumes of nickel oxide.

INCOMPATIBILITY (MATERIALS TO AVOID):

None known.

CONDITIONS TO AVOID:

None known.

11. TOXICOLOGICAL INFORMATION

TOXICITY DATA:

IARC has classified nickel oxide as carcinogenic to humans with sufficient evidence of carcinogenicity. NTP has classified nickel oxide as NTP 1 (which is known to be a carcinogen with sufficient evidence of carcinogenicity from studies in humans which indicates a casual relationship between the chemical and human cancer; and a NTP 2 (material which is reasonably anticipated to be a carcinogen): (A) limited evidence of carcinogenicity from studies in humans which indicates that casual relationship is credible and (B) sufficient evidence of carcinogenicity from studies in experimental animals.

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ACUTE ORAL LD50: No data at this time.
ACUTE DERMAL LD50: No data at this time.
ACUTE INHALATION LC50: No data at this time.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION:

No data at this time

CHEMICAL FATE INFORMATION:

No data at this time.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD:

This product is not regulated as a RCRA hazardous waste by the Federal EPA but may be regulated in certain states. Dispose according to federal, state and local regulations.

14. TRANSPORT INFORMATION

DOT SHIPPING NAME: Not Regulated
DOT HAZARD CLASS: None
UN/NA NUMBER: None
DOT PACKING GROUP: None

AIR FREIGHT TRANSPORTATION: Not Regulated

OCEAN TRANSPORTATION: Not Regulated.

15. REGULATORY INFORMATION

TSCA STATUS:

This product is listed on the US TSCA Inventory.

CALIFORNIA PROPOSITION 65:

This product is not known to contain any chemicals known to the state of California to cause cancer or birth defects. However, we do not conduct routine analysis for all listed materials.

CLEAN AIR ACT S112 HAZARDOUS AIR POLLUTANTS:

Nickel Compounds.

SARA 302 EXTREMELY HAZARDOUS SUBSTANCES LIST:

This product does not contain greater than 1.0% of any chemical substance on the SARA Extremely Hazardous Substance List.

SARA (311, 312) HAZARD CLASS:

Chronic health hazard.

SARA SECTION 313 TOXIC CHEMICALS:

Nickel Compounds >99%

AUSTRALIAN INVENTORY CHEMICAL SUBSTANCES:

This product is listed on the Australian Core Inventory of Chemical Substances (ACOIN).

CANADIAN INVENTORY:

This product is listed on the Domestic Substance List (DSL).

EINECS REGULATIONS:

This product is listed on the European Existing Chemical Substance Inventory (EINECS).

JAPAN:

Unknown at this time.

KOREAN CHEMICAL INVENTORY:

This product is listed on the Korean List of Existing Chemical Substances.

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16. OTHER INFORMATION

DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES:

The information in this document is believed to be correct as of the date issued. However, no warranty of merchantability, fitness for any particular purpose, or any other warranty is expressed or is to be implied regarding the accuracy or completeness of this information, the results to be obtained from the use of this information or the product, the safety of this product, or the hazards related to its use. This information and product are furnished on the condition that the person receiving them shall make his own determination as to the suitability of the product for his particular purpose and on the condition that he assume the risk of his use thereof.

17. LABEL INFORMATION

SIGNAL WORD: CAUTION

TARGET ORGANS:

May cause sensitization by inhalation and skin contact. Prolonged inhalation of nickel dust, or metal dust, fume or mist containing nickel may cause serious respiratory illness. **CANCER HAZARD** (contains nickel oxide which) can cause cancer. Risk of cancer depends on duration and level of exposure.

EYES:

Immediately flush with large amounts of water and continue flushing until irritation subsides.

SKIN:

Wash thoroughly with soap and plenty of clean water. If irritation occurs, contact a physician.

INHALATION:

In case of inhalation of nickel dust, fume or mist, remove from exposure. If necessary give oxygen, contact a physician.

INGESTION:

In case of ingestion and if conscious, induce vomiting. Contact a physician.

HANDLING:

Avoid contact with skin and eyes. Avoid breathing the dust. Use with adequate ventilation. Always use an approved respirator for dust, gloves and safety glasses when opening/emptying containers or processing this material. Do not eat or drink in work area. Wash in soap and water after exposure to any dust.

STORAGE:

Partly used containers should be sealed. This material should be stored in sealed containers to avoid dampness and dust.

ACTION TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

The spill should first be contained and the area should be cleaned by wet-sweeping or vacuum cleaning (HEPA filter). Minimize the creation of dust. Approved NIOSH respirator for dust should be worn.

EXTINGUISHING MEDIA:

Not applicable. Product does not burn.

FORMAT CODE: franklin

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