



OMG AMERICAS, INC  
127 PUBLIC SQUARE  
1500 KEY TOWER  
CLEVELAND, OHIO 44114

## MATERIAL SAFETY DATA SHEET

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** 76% NICKEL OXIDE  
**PRODUCT CODE:** 116683

**MANUFACTURING LOCATION:**

OMG AMERICAS, INC.  
TWO MILE RUN ROAD  
VENANGO COUNTY, FRANKLIN, PA 16323  
PLANT TELEPHONE NUMBER: 814-432-2125  
CUSTOMER SERVICE, R&D AND SALES: 440-899-2950

**DATE REVISED:** 01/21/2008  
**DATE PRINTED:** 02/25/2008

**CHEMICAL FAMILY/USE:** Inorganic salt

**IN CASE OF EMERGENCY CONTACT:**

CHEMTREC: 800-424-9300 (24 HOURS A DAY, 7 DAYS A WEEK)  
OUTSIDE THE US: + (703)-527-3887 (COLLECT CALLS ACCEPTED)

**HMIS:**

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

\*Chronic health hazard

### 2. HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW:** Black powder. Causes allergic contact dermatitis. Human carcinogen of the paranasal sinuses and lungs. Irritating to the eyes, respiratory system and skin. May cause occupational asthma, both immediate and delayed onset.

**EYE CONTACT:** May cause mild eye irritation.

**SKIN CONTACT:** May cause an allergic contact dermatitis which by definition requires prior nickel exposure. Does not cause immediate irritant contact dermatitis. Because nickel exposure is common in the non-occupational environment, a prior workplace is not necessary for allergic dermatitis to develop. Once established, skin sensitization to nickel is permanent.

**INHALATION:** Inhalation is the route of exposure associated with being "carcinogenic to humans." See Section 11, Toxicological Information. May cause irritation to the nose and paranasal sinuses. Asthma is unlikely, but possible.

**INGESTION:** Relatively non-toxic on oral ingestion. Systemic absorption from the gastrointestinal tract is minimal, if any.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	PERCENT	ACGIH TLV:	ACGIH STEL:	OSHA PEL:	OSHA STEL:	Units that the TWAs and STELs are in:
Nickel Oxide 1313-99-1	>99	0.2**	NE	1	NE	mg/m <sup>3</sup>

\*\*For Nickel, Insoluble compounds, as Ni

### 4. FIRST AID MEASURES

**EYES:**

Flush immediately with large amounts of water and continue flushing for 15 minutes or until irritation subsides, whichever is longer.

**SKIN:**

Remove victim from contaminated area. Wash immediately and thoroughly with soap or mild detergent and water. Remove and isolate contaminated clothing, jewelry, and shoes. Gently brush away excess solid contaminate. Consult a physician if irritation persists.

**INHALATION:**

Move the exposed person to fresh air at once. If indicated, a qualified pre-hospital medical provider (such as a first responder or EMT) may give oxygen. Contact a physician.

**INGESTION:**

Give large amounts of water to drink if person is completely conscious. Get medical attention as a precaution.

**MEDICAL CONDITIONS AGGRAVATED:**

Pre-existing nickel allergic contact dermatitis. Skin sensitization is permanent.

**NOTE TO PHYSICIAN:**

Treat symptomatically and supportively.

### 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 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.

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## 7. HANDLING AND STORAGE

### 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):

Can react violently with fluorine, hydrogen peroxide, hydrogen sulfide, iodine and barium oxide in the presence of air.

### CONDITIONS TO AVOID:

Avoid dust generation.

## 11. TOXICOLOGICAL INFORMATION

### TOXICITY DATA:

Refer to the most recent assessment by the International Agency for Research on Cancer (IARC). This organization's website is [www.iarc.fr](http://www.iarc.fr). Nickel compounds are found in Volume 49 of the monographs. Nickel oxide was classified as Group 1 meaning "carcinogenic to humans" for paranasal and lung cancer. The relative insolubility of nickel oxide is thought to contribute to pulmonary bioaccumulation and subsequent carcinogenicity.

The National Toxicology Program (NTP) has classified Nickel Compounds as "Known to Human Carcinogens", based on sufficient evidence of carcinogenicity from studies in humans, including epidemiological and mechanistic information, which indicates a casual relationship between exposure to nickel compounds and cancer. Refer to the NTP 10th Report on Carcinogens on the organization's website, <http://ntp-server.niehs.nih.gov>.

Causes allergic contact dermatitis. As many as 15% of women and 5% of men in the general population with no history of occupational nickel exposure may be sensitized to nickel based on patch testing. Non-occupational exposure to nickel resulting in contact dermatitis has occurred from jewelry, white gold, metal clothing fasteners, wrist watches, and dental prostheses. Nickel sensitization is permanent. A "nickel itch" may proceed a rash by up to seven days. The rash may take many forms, but typically a papular erythema appears first on the hands, which spread later to the exposed areas on the arms. More chronic forms of nickel contact dermatitis appear similar to atopic dermatitis or neurodermatitis. Eruptions that are distant from the site of contact have been described.

<b>ACUTE ORAL LD50:</b>	No data at this time.
<b>ACUTE DERMAL LD50:</b>	No data at this time.
<b>ACUTE INHALATION LC50:</b>	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

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

**AIR TRANSPORTATION:** Not Regulated

**OCEAN TRANSPORTATION:** Not Regulated

## 15. REGULATORY INFORMATION

### TSCA STATUS:

This product is listed on the US TSCA Inventory.

### TSCA 12(b) EXPORT NOTIFICATION:

No components of this product are subject to TSCA 12(b) export notification requirements.

### CALIFORNIA PROPOSITION 65:

This material may contain the following chemicals which are known to the State of California to cause cancer or birth defects and are subject to the requirements of California Proposition 65:

Nickel Compounds      Cancer

### SARA 302 EXTREMELY HAZARDOUS SUBSTANCE LIST:

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

### CLEAN AIR ACT S112 HAZARDOUS AIR POLLUTANTS:

Nickel Compounds.

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## 15. REGULATORY INFORMATION

### **SARA (311, 312) HAZARD CLASS:**

Acute health hazard. 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:**

This product is listed on the Japanese Existing and New Chemical Substances (ENCS).

### **KOREAN CHEMICAL INVENTORY:**

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

### **PHILIPPINE INVENTORY:**

This product is listed on the Philippines Inventory of Chemicals and Chemical Substances (PICCS).

### **CHINESE INVENTORY:**

This product is listed on the Chinese Inventory of Existing Chemical Substances.

## 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:**

Causes allergic contact dermatitis. Human carcinogen of the paranasal sinuses and lungs. Irritating to the eyes, respiratory system and skin. May cause occupational asthma, both immediate and delayed onset.

CANCER HAZARD (contains nickel oxide which) can cause cancer. Risk of cancer depends on duration and level of exposure.

### **EYES:**

Flush immediately with large amounts of water and continue flushing for 15 minutes or until irritation subsides, whichever is longer.

### **SKIN:**

Remove victim from contaminated area. Wash immediately and thoroughly with soap or mild detergent and water. Remove and isolate contaminated clothing, jewelry, and shoes. Gently brush away excess solid contaminate. Consult a physician if irritation persists.

### **INHALATION:**

Move the exposed person to fresh air at once. If indicated, a qualified pre-hospital medical provider (such as a first responder or EMT) may give oxygen. Contact a physician.

### **INGESTION:**

Give large amounts of water to drink if person is completely conscious. Get medical attention as a precaution.

### **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.

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## 17. LABEL INFORMATION

**EXTINGUISHING MEDIA:**

Not applicable. Product does not burn.