



SAFETY DATA SHEET

Section 1: Product identifier

Vitraglaze Stoneware: Metallic Bronze

Section 2: Hazard Identification

This product contains Nickel Oxide (<2.5%) which has the following classification:

Signal word: DANGER



Hazard Statements: H317: May cause an allergic skin reaction. H350: May cause cancer.
H413: May cause long lasting harmful effects to aquatic life.

Precautionary Statements: P260: Do not breathe dust / fume / gas / mist / vapours / spray.
P273: Avoid release to the environment.
P280: Wear protective gloves / protective clothing / eye protection / face protection.

Response Statement: P333+P313: If skin irritation or a rash occurs, get medical advice / attention.

Section 3: Composition / information on ingredients

Free Nickel Oxide

Hazardous Ingredients	Typical Composition (%)	CAS No	EINECS / EC label No
Nickel Oxide (NiO)	98	1313-991	215-215-7
Cobaltous Oxide (CoO)	0 – 1.5	1307-96-6	215-154-6
Nickel Hydroxide	0 – 0.5	12054-48-7	235-008-05

Section 4: First Aid Measures

Ingestion:	No specific first aid required.
Inhalation:	No specific first aid required.
Skin:	Remove contaminated clothing and was affected areas thoroughly with soap and water. If skin irritation or rash occurs, get medical attention / advice.
Eyes:	Irrigate eyeball thoroughly with water for at least 10 minutes. If discomfort persists, seek medical attention.

Most important symptoms and effects, both acute and delayed:

Skin contact – rash

Eye contact – redness

Indication of any immediate medical attention and special treatment required: None

Section 5: Firefighting Measures

Extinguishing Media: Any type to be selected according to materials stored in the immediate area.

Unsuitable Extinguishing Media: None – care should be taken to observe the surrounding local area. Advice for firefighters: Use of approved supplied air or self-contained breathing apparatus operated in positive pressure mode are satisfactory. Totally impervious protective suits, gloves and boot should be worn.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

General measures:	Keep public away from danger area. Avoid dust production. Avoid all contact with the substance.
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Personnel:	No additional information available.
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Environmental Precautions:	Prevent entry to watercourses, sewers and soil. Notify local authorities if product enters public waters / sewers.
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Methods and material for containment / cleaning up

Collect mechanically and transfer into appropriate container for disposal – avoiding the creation of dust.

Section 7: Handling and Storage

Precautions for safe handling:	Do not breathe dust. Avoid all contact with the substance. Wash hands and other exposed areas with water after handling. Remove contaminated clothing and shoes. Wash clothing before re-using.
Packaging:	Empty containers will retain residue. Always adhere to safety warnings and handle empty packaging as if they were full. Avoid contact with any remaining residue / substance.
Hygiene measures:	When using, do not eat, drink or smoke. Wash hands and other exposed areas with soap and water before eating, drinking, smoking or leaving the work area. Remove contaminated clothing and shoes.
Conditions for safe storage:	Store in a cool, dry, well ventilated environment. Keep away from food, drink and animal feeding stuffs.
Incompatible products:	None known.

Section 8: Exposure Controls / Personal Protection



Contents:
Nickel Compounds

Workplace Exposure Limit (LTE – 8 hour TWA):
0.5 Mg/M³

If practically possible use product in a closed system. Emergency eye wash facilities should be made available in the immediate vicinity of potential exposure. Local exhaust ventilation and good general ventilation must be adequate to meet exposure standards.

Hand Protection:	Use gloves resistant to chemical products. Obtain advice from the PPE supplier.
Eye Protection:	Wear safety goggles – preferably with side shields. Obtain advice from the PPE supplier.
Skin / Body Protection:	Wear suitable protective clothing.
Respiratory Protection:	Use respiratory protection mask with P3 type filter. Obtain advice from the PPE supplier.
Environmental Exposure Controls:	Do not allow product or waste to enter sewers or soil.

Section 9: Physical and Chemical Properties

Appearance:	Solid / Powder
Colour:	Black
Odour:	Odourless
Melting Point:	>1900 Deg C
Flash Point:	N/A
Self-ignition Temperature:	>400 Deg C
Oxidising Properties:	N/A

Cont'd

Section 10: Stability and Reactivity

Stability / Reactivity:	Stable under normal conditions of handling and storage
Chemical Stability:	Stable under normal conditions of handling and storage
Hazardous Reactions:	Stable under normal conditions of handling and storage
Conditions to avoid:	Protect from moisture
Incompatible Materials:	None known

Section 11: Toxicological Information

The toxicology of the reported ingredients are listed below. As a mixture, the toxicological properties are not known.

Nickel Oxide**Acute Toxicity**

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|-----------------|--|
| i. Oral: | Non-toxic – LD ₅₀ Oral Rat >11000mg/kg (green); 9990 (black) |
| ii. Inhalation: | Non-toxic – LD ₅₀ INHAL RAT >5.08mg/kg (green); >5.15 (black) |
| iii. Dermal: | No specific data available |

Corrositivity / Irritation

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|------|--------------------|----------------------------|
| i. | Respiratory Tract: | No specific data available |
| ii. | Skin: | Not corrosive / irritating |
| iii. | Eyes: | May cause mild irritation |

Sensitivity

- | | | |
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| i. | Respiratory Tract: | Nickel metal induced asthma is possible but very rare. The data is not sufficient to conclude that nickel metal is classified as a respiratory sensitizer. |
| ii. | Skin: | Nickel Oxide is presently classified as a skin sensitizer (R43) according to current regulations. |
| iii. | Pre-existing Conditions: | Personnel known to be allergic to nickel should avoid contact with nickel whenever possible to reduce / remove the likelihood of nickel allergic dermatitis reactions (skin irritation / rashes). Repeated contact over a prolonged period of time may result in persistent chronic palm / hand dermatitis in certain individuals despite efforts to reduce / avoid nickel exposure. |

Chronic Toxicity

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| i. | Oral: | No specific data available. |
| ii. | Inhalation: | Exposure related toxicities were noted following 13 weeks and two years of exposure to NiO in both rats and mice in the US NTP chronic rat inhalation study. Adverse effects in rodents were primarily limited to the lung. The LOAEC from the chronic study in rats was 0.6 mg NiO/m ³ or 0.5 mg Ni/m ³ |
| | Dermal: | No specific data available. |

Carcinogenicity

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| i. | Ingestion: | No specific data available / not classified. |
| ii. | Inhalation: | Category 1A; Human epidemiological and animal data suggest that at least some forms of Nickel Oxide can be carcinogenic to the respiratory tract of humans after inhalation. |

Cobaltous Oxide

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| i. | Inhalation: | Causes irritation to the respiratory tract – symptoms may include coughing, breathlessness and nausea. Respiratory hypersensitivity asthma may appear. Inhalation of cobalt dust / fumes is associated with an increased incidence of lung disease. |
| ii. | Ingestion: | Causes abdominal pain, nausea, vomiting, flushing of the face and ears, mild hypotension, rash and ringing in the ears. |
| iii. | Skin Contact: | May cause dermatitis. Causes skin irritation. Symptoms can include redness, itching and pain. |
| iv. | Eye Contact: | Causes irritation, redness and pain. |
| v. | Pre-existing Conditions: | Personnel with pre-existing skin disorders or eye problems, or impaired liver, kidney or respiratory function could be more susceptible to the effects of the substance. Personnel with allergies or sensitivity to cobalt may be more susceptible to the effects of the substance. |

Nickel Hydroxide

No specific data available.

Section 12: Ecological Information

Toxicity:	Aquatic Chronic 4. May cause long lasting harmful effects to aquatic life.
Persistence & Degradability:	The methods for determining the biological degradability are not applicable to inorganic substances.
Mobility in Soil:	Product is essentially insoluble in water.
Adverse Effects:	None known.

Section 13: Disposal Considerations

Waste Treatment Methods:	Recover / recycle any waste where possible. Dispose of in accordance with local / national / international regulations.
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Section 14: Transport Information

In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA

UN No:	Not applicable.
UN Proper Shipping Name:	Not classified as dangerous according to transport regulations.
Transport Hazard Class:	Not applicable.
Packing Group:	Not applicable.
Environmental Hazard:	No specific data available.

Section 15: Regulatory Information

Classification according to Dangerous Substance Directive 67/584EEC:	T – Toxic: Category 1 Carcinogen
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R48/23: Toxic: danger of serious damage to health by prolonged exposure through inhalation.

R49: May cause cancer by inhalation.

R43: May cause sensitization by skin contact.

R53: May cause long-term adverse effects in the aquatic environment.

S53: Avoid exposure – obtain special instructions before use.

S45: In case of accident or if you feel unwell seek medical advice immediately and show label where possible.

S61: Avoid release to the environment. Refer to special instructions / safety data sheet.

Section 15: Regulatory Information (Cont'd)

Classification according to Part 3 of Annex VI of EU Regulations No 1272/2008

Skin Sensitization: Category 1 Carcinogenicity: Category 1

Specific Target Organ Toxicity, Repeated Exposure : Category 1 Aquatic Chronic: Category 4

Symbols:

GHS07 – Exclamation Mark / GHS08 – Health Hazard / Signal word: DANGER



Hazard Statements:

H317: May cause an allergic skin reaction H350: May cause cancer

H372: Causes damage to organs through prolonged or repeated exposure

H413: May cause long lasting harmful effects to aquatic life

Precautionary Statements:

P201: Obtain special instructions before use

P202: Do not handle until all safety precautions have been read and understood

P260: Do not breathe dust / fume / gas / mist / vapours / spray P261: Avoid

breathing dust / fume / gas / mist / vapours / spray P264: Wash hands and face thoroughly after handling

P270: Do not eat, drink or smoke when using this product

P272: Contaminated work clothing should not be allowed out of the work place

P273: Avoid release to the environment

P280: Wear protective gloves / protective clothing / eye protection / face protection

P281: Use personal protective equipment as required

Response:

P302+P352: IF ON SKIN: Wash with plenty of water

P308+P311: If exposed or concerned, seek medical advice / attention

P333+P313: If skin irritation or a rash occurs, get medical advice / attention

Section 16: Other Information

The information contained in this safety data sheet has been prepared using the best available information, however in view of technical developments, this may alter.

The material must only be used for its stated purpose and the information contained within this data sheet is offered solely for use in the evaluation of this product in respect of safety, health and environmental hazards. Due to the many factors outside our control when using this product, we cannot accept liability for any injury, accident, loss or damage caused through its use.