

Material Safety Data Sheet (MSDS)

Common Name: Nickel Oxide**Emergency No.:** +91-995 832 0889**Shipping:** Not classified as dangerous for transportation via land/inland, air or sea

Section I- General Information

- Product Name/Chemical Formula : Nickel Oxide /NiO
- CAS Number: 1313-99-1 NiO
- Contact Information: Samics Research Materials Pvt. Ltd.
Address: G1-1054 RIICO Industrial Area, Phase III
Bhiwadi, Rajasthan, India
Phone: +91-9958320889

Section II. Composition / Information on Ingredients

- Product Name/Chemical Formula : Nickel Oxide/NiO
- CAS Number: 1313-99-1 NiO,

Section III. Hazards Identification

- Hazard description: T Toxic
- Information pertaining to particular dangers for man and environment: not applicable

Section IV. First Aid Measures

- After inhalation Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek immediate medical advice.
- After skin contact Immediately wash with water and soap and rinse thoroughly. Seek immediate medical advice.
- After eye contact Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing Seek immediate medical advice.

Section V. Fire Fighting Measures

- Suitable extinguishing agents Product is not flammable. Use fire-fighting measures that suit the surrounding fire.
- Protective equipment: Wear self-contained respirator. Wear fully protective impervious suit.

Section VI. Accidental Release Measures

- Person-related safety precautions: Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation
- Measures for environmental protection: Do not allow material to be released to the environment without proper governmental permits.
- Measures for cleaning/collecting: pick up mechanically.
- Additional information: See Section 7 for information on safe handling See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

Section VII. Handling and Storage

- Handling

- Information for safe handling: Keep container tightly sealed. Store in cool, dry place in tightly closed containers. No special precautions are necessary if used correctly.
- Information about protection against explosions and fires: This product is not flammable.
- Storage Requirements to be met by storerooms and receptacles: No special requirements.
- Information about storage in one common storage facility: Do not store with acids or oxidizing agents.
- Further information about storage conditions: This product is hygroscopic. Protect from carbon dioxide. Keep container tightly sealed. Store in cool, dry conditions in well sealed containers

Section VIII. Exposure Controls and Personal Protection

- Additional information about design of technical systems: Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.
- Components with limit values that require monitoring at the workplace: Limit Values (mg/m³ Component) ACGIH TLV OSHA PEL (None required)
- Additional information: No data
- Personal protective equipment
- General protective and hygienic measures The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Remove all soiled and contaminated clothing immediately. Wash hands before breaks and at the end of work.
- Breathing equipment: Use suitable respirator when high concentrations are present.
- Protection of hands: Impervious gloves
- Eye protection: Safety glasses
- Body protection: Protective work clothing.

Section IX. Physical and Chemical Properties

- Form: Powder
- Color: Green
- Odor: None
- Melting point/Melting range: Not determined
- Boiling point/Boiling range: Not determined
- Flash point: Not applicable
- Ignition temperature: Not determined
- Decomposition temperature: Not determined
- Danger of explosion: Product does not present an explosion hazard.
- Explosion limits:
- Lower: Not determined
- Upper: Not determined
- Vapor pressure: Not determined
- Density: Not determined
- Solubility in / Miscibility with Water: Not determined

Section X. Stability and Reactivity

- Thermal decomposition / conditions to be avoided: Decomposition will not occur if used and stored according to specifications.
- Materials to be avoided: acids, air, carbon dioxide, oxidizing agents
- Dangerous reactions No dangerous reactions known
- Dangerous products of decomposition: Metal oxide fume

Section XI. Toxicological Information

- Acute toxicity: No data
- Primary irritant effect: on the skin: powder: irritant effect on the eye: powder: irritant effect
- Sensitization: sensitization possible through skin contact
- Subacute to chronic toxicity: Nickel and nickel compounds may cause a form of dermatitis known as nickel itch. They may also cause intestinal disorders, convulsions and asphyxia. Airborne nickel contaminated dusts are regarded as carcinogenic to the respiratory tract.
- Additional toxicological information: To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.
- Carcinogenicity classification information for Nickel Oxide:
IARC-1: Carcinogenic to humans: sufficient evidence of carcinogenicity.
NTP-2: Reasonably anticipated to be a carcinogen: limited evidence from studies in humans or sufficient evidence from studies in experimental animals.
ACGIH A1: Confirmed human carcinogen: Agent is carcinogenic to humans based on epidemiological studies of, or convincing clinical evidence in, exposed humans.
The Registry of Toxic Effects of Chemical Substances (RTECS) contains tumorigenic and/or carcinogenic and/or neoplastic data for components in this product.

Section XII. Environmental Information

- General notes: Do not allow material to be released to the environment without proper governmental permits.

Section XIII. Disposal Information

- Product: Recommendation: Consult state, local or national regulations for proper disposal.
- Uncleaned packagings: Recommendation: Disposal must be made according to official regulations.

Section XIV. Transportation Information

Not a hazardous material for transportation.

- DOT regulations: Hazard class: None
- Land transport ADR/RID (cross-border) ADR/RID class: None
- Maritime transport IMDG: IMDG Class: None
- Air transport ICAO-TI and IATA-DGR: ICAO/IATA Class: None
- Transport/Additional information: Not dangerous according to the above specifications.

Section XV. Regulatory Information

- Product related hazard information: observe the general safety regulations when handling chemicals.
Hazard symbols: T Toxic
Risk phrases: 49 May cause cancer by inhalation. 43 May cause sensitization by skin contact.
Safety phrases: 53 Avoid exposure - obtain special instructions before use. 45 In case of accident or if you feel unwell, seek medical advice immediately.
- National regulations All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical Substance Inventory. This product contains a chemical known to the state of California to cause cancer or reproductive toxicity.
- Information about limitation of use: For use only by technically qualified individuals. This product contains nickel and is subject to the reporting requirements of section 313 of the Emergency Planning and Community

Right to Know act of 1986 and 40CFR372.

Section XVI. Other Information

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Disclaimer: The information provided in this Material Safety Data Sheet is believed to be the best to our knowledge and is provided based on sources that are considered reliable. However, the information is provided without any warranty, expressed or implied, regarding the accuracy. This information might not be applicable if this material is used in combination with other materials.