SECTION 1 - IDENTIFICATION

Trade Name: Nickel Oxide for Ni
Catalog Number: 80-1395
Product Description: Analyzed Quantitative Unknowns
Manufacturer: Auric Enterprises, Inc.
d/b/a Thorn Smith Laboratories
Address: 7755 Narrow Gauge Road
          Beulah, MI  49617
Phone Number: 231-882-4672
SDS Number: TSL-010

SECTION 2 – HAZARDS IDENTIFICATION

WARNING: Harmful if swallowed or inhaled. Causes irritation to skin, eyes and respiratory tract. May cause nasal or lung damage. May cause allergic skin or respiratory reaction. Cancer hazard. Can cause cancer (risk of cancer depends on duration and level of exposure).

Potential Acute Health Effects:
Inhalation of dust may cause headaches, dizziness, and difficult breathing. Finer dust particulates may irritate the respiratory tract. Symptoms may include coughing, sore throat, and shortness of breath. Inhalation of nickel and nickel compounds is associate with nasal and lung damage and cancer. Ingestion may cause irritation to the gastrointestinal tract. Large oral dose may cause nausea, vomiting, abdominal pain and diarrhea. Skin and eye contact may cause irritation, resulting in redness and pain. May cause allergic dermatitis to the skin. Nickel is a contact allergen and sensitizer.

Potential Chronic Health Effects:
Prolonged exposure to excessive concentrations of dust may cause chronic pulmonary disorders. Nickel and certain nickel compounds are considered carcinogenic and noted for producing nasal and lung cancer.

Aggravation of Pre-existing Conditions:
Skin contact with some nickel compounds in sensitive individuals may cause dermatitis (nickel itch).

SECTION 3 – COMPOSITION AND INFORMATION ON INGREDIENTS

Nickel Oxide
Formula: NiO
CAS No.: 1314-06-3
OSHA PEL: 1 mg (Ni)/m$^3$ (total dust)
ACGIH TLV: 1 (Ni) mg/m$^3$
SECTION 4 – FIRST AID MEASURES

**Eye Contact:** Do not rub eye(s). Flush with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. If irritation persists, seek medical attention.

**Skin Contact:** Remove any contaminated clothing. Wipe off excess from skin. Immediately wash skin with soap and water for at least 15 minutes. Get medical attention if irritation develops or persists.

**Inhalation:** If a person Breaths in large amounts, move the exposed person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.

**Ingestion:** If swallowed, and if person is conscious, immediately give large amounts of water. Get medical attention.

SECTION 5 – FIRE FIGHTING MEASURES

**Flammability:** Non-Flammable
**Flash Points:** Not Applicable
**Auto-Ignition:** Not Applicable
**Flammable Limits:** N/A
**Extinguishing Media:** Use extinguishing media appropriate to the surrounding fire.
**Fire Fighting Procedure:** Firefighters should wear self-contained breathing apparatus and protective clothing to prevent inhalation or contact with skin and eyes.
**Fire/Explosion Hazards:** None listed.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

**Spill or Leak Procedures:** Utilize suitable protective clothing and equipment. Carefully sweep up and containerize for reclamation or disposal. Dispose in accordance to all applicable local, state and federal environmental regulations.

SECTION 7 – HANDLING AND STORAGE

**Storage Temperatures:** Store at ambient temperatures.
**Shelf Life:** Unlimited in tightly closed container. Suitable for any general chemical storage area.
**Special Sensitivity:** No information available.
**Precautions to be taken in handling and storage:** Store in accordance with all local, state, and federal environmental regulations.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

**Respiratory Protection (Specify Type):** NIOSH approved N95 respirator or better
**Protective Gloves:** Wear protective gloves.
**Eye Protection:** Wear chemical safety glasses.
Ventilation To Be Used: Use adequate general or local exhaust ventilation to keep fume or dust levels as low as possible.

__X__ Local Exhaust  ___X__ Mechanical (General)  _____ Special

Other Protective Clothing and Equipment: Wear clean body-covering clothing. Emergency showers and eye was stations should be available.

Hygienic Work Practices: Avoid contact with eyes, skin, and clothing. Avoid breathing dust. Keep container closed when not in use. Use with adequate ventilation. Wash thoroughly after handling.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical Form: Powder
Color: Gray-black powder
Odor: Odorless
Boiling Point: N/A
Melting Point: Decomposes at ca. 600°C into NiO and Oxygen.
Solubility in Water: Insoluble in water.
Specific Gravity: 4.84
Water Reactive: No
Vapor Density (Air-1): N/A
Evaporation Rate (-1): N/A

SECTION 10 – STABILITY AND REACTIVITY

STABILITY:  ____X__ Stable  _____ Unstable
Conditions to Avoid: Incompatibles.
Incompatibility (Materials to avoid): Increases sensitivity of nitroalkanes to heat. Hazardous reaction with hydrogen peroxide.
Hazardous Decomposition Products: Decomposes into nickel monoxide and oxygen.
HAZARDOUS POLYMERIZATION: _____ May Occur  ___X__ Will Not Occur

SECTION 11 – TOXICOLOGICAL INFORMATION

NTP Carcinogen: Known: No  Anticipated: Yes  IARC Category: 1

SECTION 12 – ECOLOGICAL INFORMATION

Not Known

SECTION 13 – DISPOSAL CONSIDERATIONS

Dispose of in accordance with all applicable local, state and federal environmental regulations.
SECTION 14 – TRANSPORTATION INFORMATION

Domestic (D.O.T.)
Proper Shipping Name: Chemicals, n.o.s.

International (T.M.O.)
Proper Shipping Name: Chemicals, n.o.s.

Air (I.C.A.O.)
Proper Shipping Name: Chemicals, n.o.s.

SECTION 15 – REGULATORY INFORMATION

Non-regulated.

SARA TITLE III HAZARD CATEGORIES AND LISTS

Acute: Yes  Chronic: Yes  Flammability: No  Pressure: No  Reactivity: No
Extremely Hazardous Substance: No  CERCLA Hazardous Substance: No
SARA 313 Toxic Chemicals: No  TSCA Inventory: No

SECTION 16 – OTHER INFORMATION

No information found.

Date Prepared: October 9, 1989
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