

Material Safety Data Sheet

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Commercial Name: Shimalite Ni P/N 221-27719-00
Material Name: Nickel -13.5%, Chromosorb W-80/100 NAW
General Use: GC Catalyst

Manufacturer: SHINWA CHEMICAL INDUSTRIES, LTD.
Address: 50-2 Kagekatsu-cho, Fushimi-ku, Kyoto 612-8307 Japan
Emergency Ph: 81(75)621-2360
Emergency Fax:81(75)602-2660
24 Hour Emergency Contact: 410-768-8155 (AIRPACK; 500 McCormick Dr.; Glen Burnie, MD 21061)

2. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS No.	Content
Nickel	7440-02-0	13.5%
Diatomaceous Earth	68855-54-9	86.5%

3. HAZARDS IDENTIFICATION

Nickel

Eye: May cause eye irritation.

Skin: May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material. May cause severe irritation and possible burns. May cause dermatitis.

Ingestion: Causes gastrointestinal irritation with nausea, vomiting and diarrhea.

Inhalation: Inhalation of fumes may cause metal fume fever, which is characterized by flu-like symptoms with metallic taste, fever, chills, cough, weakness, chest pain, muscle pain and increased white blood cell count. Inhalation of a mist of this material may cause respiratory tract irritation. Breathing Nickel (Dust and Fume) can cause a sore or hole in the "bone" (septum) dividing the inner nose.

Chronic: Prolonged or repeated skin contact may cause sensitization dermatitis and possible destruction and/or ulceration. May cause respiratory tract cancer.

Diatomaceous Earth

May be harmful if inhaled and ingested.

May cause eye and skin irritation.

4. FIRST AID MEASURES

GENERAL ADVICE :

Wash off immediately with soap and plenty of water. In the case of respirable dust and/or fumes, use self-contained breathing apparatus and dust impervious protective suit. Use personal protective equipment.

INHALATION :

Move victim to fresh air. If breathing is difficult, give oxygen. If irritation persists, consult a physician.

SKIN CONTACT :

Remove contaminated clothes and shoes, rinse skin with plenty of water or shower. Use soap to help assure removal. If irritation persists, consult a physician.

EYE CONTACT :

Remove any contact lenses at once. Flush eyes well with flooding amounts of running water for at least 15 minutes. Assure adequate flushing by separating the eyelids with sterile fingers. If irritation persists, consult a physician.

INGESTION :

Rinse mouth, give plenty of water to dilute the substance. Never give anything by mouth to an unconscious person. Consult a physician.

5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA : Carbon dioxide, dry chemical powder, foam, water

FIRE & EXPLOSION HAZARDS : Toxic and irritating dust, fumes or smoke may be emitted.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS :

Firemen should wear normal protective equipment (full bunker gear) and positive-pressure self-contained breathing apparatus

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS :

Remove ignition sources and ventilate the area. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid raising dust and avoid contact with skin and eyes.

ENVIRONMENTAL PRECAUTIONS :

Prevent spills from entering sewers, watercourses or low areas.

METHODS FOR CLEAN UP :

Do not touch spilled material without suitable protection(See section 8). After material is completely picked up, wash the spill site with soap and water and ventilate the area. Put all wastes in a plastic bag for disposal and seal it tightly. Remove, clean, or dispose of contaminated clothing.

7. HANDLING AND STORAGE

Research use only.

HANDLING :

Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Handle material with suitable protection.

STORAGE :

Store away from sunlight in well-ventilated dry place at room temperature (preferably cool place). Keep container tightly closed.

INCOMPATIBLE PRODUCTS :

Strong oxidizers

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

Nickel

ENGINEERING MEASURES :

Use exhaust ventilation to keep airborne concentrations below exposure limits. Use only with adequate ventilation.

VENTILATION :

Local Exhaust ; Necessary, Mechanical(General) ; Recommended

PERSONAL PROTECTION ;

Respiratory protection :

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hand protection : Chemical resistant gloves

Eye protection : Safety glasses(goggles)

Skin protection : Protective clothing

CONTROL PARAMETER :

OSHA Final Limits : 1 mg/m³ TWA

ACGIH TLV(s) : 0.2 A1- inhalable particulate (insoluble compounds)

NIOSH : 0.015 mg/m³ TWA 10 mg/m³ IDLH

Diatomaceous Earth

ENGINEERING MEASURES :

Use exhaust ventilation to keep airborne concentrations below exposure limits. Use only with adequate ventilation.

VENTILATION :

Local Exhaust ; Necessary, Mechanical(General) ; Recommended

PERSONAL PROTECTION ;

Respiratory protection : NIOSH/MSHA approved respirator

Hand protection : Chemical resistant gloves

Eye protection : Safety glasses(goggles)

Skin protection : Protective clothing

CONTROL PARAMETER :

OSHA Final Limits : None established

ACGIH TLV(s) : None established

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE : Black powder

ODOR : Odorless

pH : Not available

BOILING POINT : Not available

MELTING POINT : Not available

FLASH POINT : Not available

FLAMMABILITY (solid, gas) : Not available

DECOMPOSITION TEMPERATURE : Not available

EXPLOSIVE LIMITS : Not available

VAPOR PRESSURE : Not available

SPECIFIC GRAVITY : Not available

SOLUBILITY IN ;

WATER : Insoluble

ETHANOL : Insoluble

ACETONE : Insoluble

log Po/w : Not available

10. STABILITY AND REACTIVITY

CONDITION TO AVOID : Sunlight, heat, Moisture

INCOMPATIBILITY(MATERIAL TO AVOID) : Strong oxidizers

HAZARDOUS DECOMPOSITION PRODUCTS : Not available

HAZARDOUS POLYMERIZATION : Will not occur.

11. TOXICOLOGICAL INFORMATION

Nickel

ACUTE TOXICITY DATA : IPR-RAT LD50 250mg/kg

IRRITATION DATA : Not available

MUTATION DATA : Not available

REPRODUCTIVE EFFECTS DATA : Not available

TUMORIGENIC DATA : Not available

ADDITIONAL INFORMATION ;

NTP : Reasonably anticipated to be a carcinogen

IARC : 2B: Possibly carcinogenic to humans: limited evidence in humans in the absence of sufficient evidence in experimental animals.

OSHA : Not listed

ACGIH : Group 1 carcinogen (listed as Nickel compounds)

Diatomaceous Earth

ACUTE TOXICITY DATA :	Not available
IRRITATION DATA :	Not available
MUTATION DATA :	Not available
REPRODUCTIVE EFFECTS DATA :	Not available
TUMORIGENIC DATA :	Not available
ADDITIONAL INFORMATION ;	
NTP :	Not listed
IARC :	Not listed
OSHA :	Not listed
ACGIH :	Not listed

12. ECOLOGICAL INFORMATION

Nickel

BIODEGRADABILITY :	Not available.
BIOACCUMULATION POTENTIAL :	Not available
AQUATIC TOXICITY :	Not available
OTHER INFORMATION :	Not available

Diatomaceous Earth

BIODEGRADABILITY :	Not available
BIOACCUMULATION POTENTIAL :	Not available
AQUATIC TOXICITY :	Not available
OTHER INFORMATION :	Not available

13. DISPOSAL CONSIDERATIONS

Nickel

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

Diatomaceous Earth

Dispose in a hazardous-waste site in accordance with all applicable regulations. Any disposal practice must be in compliance with country, local, state, and federal laws and regulations (contact country, local or state environmental agency for specific rules).

14. TRANSPORT INFORMATION

IATA :	Not Restricted.
DOT(Department of Transportation) :	Not a Hazardous Material for DOT shipping.

15. REGULATORY INFORMATION

Nickel

US REGULATIONS ;

TSCA CHIPs : None of the chemicals in this material have a SNUR under TSCA.

EPA :	CERCLA RQ : Not listed
	EPCRA TPQ : Not listed

OSHA : None of the chemicals in this product are considered highly hazardous by OSHA

EU REGULATIONS ;

SYMBOL :	F-Xn
R-phrases :	10-40-43
S-phrases :	16-36/37
Indication of Danger:	Highly Flammable. Harmful.

Diatomaceous Earth

US REGULATIONS ;

New Jers. RTK Haz. Subst. List, Penn. Haz. Subst. List, Canad. WHMIS IDL 1% conc.

EPA : CERCLA RQ : Not listed
EPCRA TPQ : Not listed

OSHA : TQ : Not listed

EU REGULATIONS ;

SYMBOL : Xn
R-phrases : 48/20
S-phrases : 22
EC index No. : Not listed
Indication of Danger: Harmful.

16. OTHER INFORMATION

No specific notes

The above information is believed to be correct to be the best of our knowledge and information but does not purport to be all inclusive and shall be used only as a guide. This product is intended to be used by expert persons having chemical knowledge and skill, at their own discretion and risk and Wako shall not be held liable for any damageresulting from handling or from contact with the above material.