

MATERIAL SAFETY DATA SHEET

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SECTION 1 PRODUCT IDENTIFICATION

Product Name: **Cho-Bond 1016 (uncured)**
General Name: Conductive Sealant

SECTION 2 COMPOSITION INFORMATION

<u>Components & CAS. No.</u>	<u>Weight %</u>	<u>Exposure Limits</u>
Nickel 7440-02-0	45-55	OSHA PEL TWA: 1 mg/m ³ ; ACGIH TLV TWA: 1 mg/m ³ .
Synthetic Graphite 7782-42-5	10-20	OSHA PEL TWA: 15 mg/m ³ total dust, 5 mg/m ³ respirable fraction; ACGIH TLV TWA: 2 mg/m ³ .
Silicone Compound 70131-67-8	20-25	Not Established.
Trimethylated Silica 68909-20-6	< 10	Supplier recommended TWA 5 mg/m ³ .
Methyltrimethoxysilane 1185-55-3	< 5	Supplier recommended TWA 50 ppm.
Octamethyltrisiloxane 107-51-7	<5	Not Established.

Note: Methyl alcohol may form upon contact with water or humid air. OSHA PEL TWA: 200 ppm;
ACGIH TLV TWA (skin) 200 ppm; ACGIH STEL (skin) 250 ppm.

SECTION 3 HAZARDS IDENTIFICATION

Emergency Overview: Gray paste with a mild odor. May cause mild irritation of the eyes, mucous membranes and respiratory tract. Avoid skin contact. Skin contact may cause allergic nickel sensitivity. Chronic health hazards. Refer to other sections of the MSDS for detailed information.

HMIS Rating: Health: 2 Flammability: 1 Reactivity: 0

Routes of Entry: Inhalation, skin and eye contact.

Acute Effects

- Eye: Contact may cause mild eye irritation.
- Skin: Prolonged or repeated contact may cause skin irritation. Repeated contact with nickel may cause sensitization, an allergic skin reaction, with symptoms including reddening, swelling, rash, scaling or blistering. Persons who become sensitized may exhibit these symptoms on subsequent contact with very small amounts of material.
- Inhalation: Inhalation may cause mild irritation of the mucous membranes and upper respiratory tract.
- Ingestion: Harmful if swallowed.

Chronic Effects: The National Toxicology Program (NTP) has listed nickel as reasonably anticipated to be a carcinogen. The International Agency of Research on Cancer (IARC) has concluded that there is sufficient evidence that nickel and nickel compounds, as a group, are carcinogenic in humans.

Epidemiological studies of workers exposed to nickel powder and to dusts and fumes generated in the production of nickel alloys and of stainless steel have not indicated the presence of a significant respiratory cancer hazard.

Inhalation of natural or synthetic graphite has resulted in cases of pneumoconiosis.

This product contains small amounts of dimethyl cyclosiloxanes. Laboratory rodents repeatedly exposed to octamethylcyclotetrasiloxane and decamethylcyclopentasiloxane by inhalation or ingestion developed increased liver weight as compared to controls. No gross or histopathological liver effects were noted.

Special Condition Effects:

When heated to temperatures above 150°C, in the presence of air, this product may form traces of formaldehyde. Formaldehyde is a potential cancer hazard, sensitizer and irritant. When handling at elevated temperatures, provide ventilation to control vapor exposure within OSHA guidelines. Review the OSHA Formaldehyde regulation for details.

This product may generate methanol on contact with water or moisture on skin, eyes and mucous membranes causing an irritating or defatting effect. Overexposure to methanol by inhalation or skin absorption may cause effects including: respiratory irritation and central nervous system effects progressing from headache, dizziness, staggering gait and confusion to unconsciousness, coma and death. The severity of these effects will be dependent on the methanol concentration and length of exposure.

Aggravated Medical Conditions: No data available for this product mixture.

SECTION 4 FIRST AID MEASURES

Handle in accordance with good industrial hygiene and safety practices by avoiding unnecessary exposure and by removing material from the eyes, skin and clothing.

- Eye: Immediately and thoroughly flush the eyes with large amounts of water occasionally lifting the upper and lower eyelids. Get medical attention if irritation persists.
- Skin: Remove contaminated clothing. Thoroughly wash skin with soap and water for at least 15 minutes. Get immediate medical attention if irritation persists or if symptoms of exposure develop (see SECTION 3 – HAZARDS IDENTIFICATION).
- Inhalation: Remove to fresh air. Get immediate medical attention if irritation persists, breathing becomes difficult or if symptoms (as described in SECTION 3) develop.
- Ingestion: Get immediate medical attention. DO NOT induce vomiting, potential aspiration hazard. Never give anything by mouth to an unconscious, drowsy, or convulsing person.

SECTION 5 FIRE FIGHTING MEASURES

- Flash Point: Not Applicable.
- Autoignition Temp: Not Established.
- Flammability Limits: Not Applicable.
- Extinguishing Media: Carbon dioxide, water, water foam, dry chemical.
- Fire Fighting Procedures: Use self-contained breathing apparatus and protective clothing. If large quantities of material are involved, evacuate area and fight fire from a safe distance.
- Unusual Fire Hazards: Decomposition and combustion products may be toxic.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Spill response operations must be conducted in accordance with the provisions of 29 CFR 1910.120. Observe all recommendations identified in Sections 5 and 8.

- Procedures: Limit access to spill area. Dike area to contain the release. Prevent release from entering sewers or waterways. Collect spill materials for reuse or salvage. Cover remaining spilled materials with inert material to absorb residue. Transfer liquids and absorbed materials to appropriate containers. Observe all applicable local, state and federal waste management regulations.

SECTION 7 HANDLING AND STORAGE

- Handling: Avoid contact with eyes. Do not allow skin contact. Minimize exposure by inhalation. Wash thoroughly after handling and before eating, drinking or smoking. Use with adequate ventilation.

Storage: Store in a cool, dry location with adequate ventilation. Store in tightly closed container. Keep away from heat, sparks, flames and other ignition sources. Prevent contact and storage with incompatible materials.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

The recommendations described in this section are provided as general guidance for minimizing exposure. Because usage conditions vary with customer applications, specific exposure controls should be developed by a person knowledgeable in the intended usage condition and equipment.

Ventilation: Local exhaust ventilation should not be required at room temperature. However, when the product is processed at elevated temperatures, provide local exhaust ventilation to capture vapors, mists or fumes generated. Ventilation must be sufficient to maintain airborne levels of Section 2 ingredients below their exposure limits.

Eyes: Wear safety eye wear including safety glasses with side shields and chemical goggles if splashing may occur.

Skin: Wear protective gloves to prevent skin contact. Wash thoroughly after handling and before eating, drinking or smoking. Remove contaminated clothing or shoes and thoroughly clean before reuse.

Inhalation: No respiratory protection should be required. However, use NIOSH/MSHA approved respiratory protection if adequate exhaust ventilation is not provided or air sampling indicates exposure limits are exceeded. The type of respirator selected will depend on the condition of use. Respiratory protection programs must comply with 29 CFR 1910.134.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Physical Form: Gray paste.
Specific Gravity: >1
Boiling Point: Not established.
Vapor Pressure (25°C): Not Established.
Vapor Density: Heavier than air.
Solubility in Water: Insoluble.
Volatile Content (Wt%): Not Determined.

SECTION 10 STABILITY AND REACTIVITY

Chemical Stability: Stable.

Hazardous Polymerization: Will not occur.

Condition to Avoid: Avoid storage in open containers, exposure to heat/sparks/open flame or exposure to incompatible substances. Avoid exposure to moist air or water.

Incompatibilities: Oxidizers, acids, bases, water, and moist air.

Hazardous Decomposition: Thermal or chemical decomposition may produce carbon monoxide, carbon dioxide, silicon dioxide, nickel compounds, formaldehyde and traces of incompletely burned carbon products.

SECTION 11 TOXICOLOGY INFORMATION

All available toxicology information has been provided in Section 3 of this document.

SECTION 12 ECOLOGICAL INFORMATION

No data on ecological effects is available.

SECTION 13 DISPOSAL INFORMATION

Since regulations vary, consult applicable regulations or authorities before disposing of this material.

SECTION 14 TRANSPORTATION INFORMATION

This product is not regulated as a hazardous material by the U.S. Department of Transportation.

SECTION 15 REGULATORY AND MISCELLANEOUS INFORMATION

TSCA: All components of this product are listed on the TSCA inventory.

SARA 313 Chemicals: Nickel 7440-02-0

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Prepared By: Chomerics Safety Department

Revision Information: HMIS Rating added. "Uncured" added to name.

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