

器

#### (205) 322-9906 1 (800) 333-9906 (205) 322-4808 fax

# **MATERIAL SAFETY DATA SHEET**

Product Identification (Label Name): SURWELD NI™

| Ν/Α                               | N/A                           |
|-----------------------------------|-------------------------------|
| Chemical Name                     | CAS No.                       |
| Wet Welding Electrodes SURWELD NI | November 15, 2011             |
| Common Name/Trade Name            | Date Updated January 10, 2006 |

# **1. Hazardous Ingredients**

|   |                 |                       | Exposure                 | Limits    |
|---|-----------------|-----------------------|--------------------------|-----------|
| Chemical Name/Common Name               | (CAS No.)       | %                     | ACGIHTLV                 | OSHA PEL  |
| BASE METAL                              | · · · · ·       |                       |                          |           |
| Nickel                                  | 7439896         | 99 max                | as Oxide Fume<br>5       | 10        |
| Plasticized Vinyl<br>Alloying Elements: | N/A             |                       |                          |           |
| Carbon                                  | 7440440         | .08 - 0.18            |                          |           |
| Manganese                               | 7439965         | .3060 (dust)          | 5                        | 5 (c)     |
|   |                 |                       | (fume) 11                | 5 (c)     |
| Phosphorus                              | 7723140         | .015035 (yellow)      | .1                       | .1        |
| Sulfur                                  | 7704349         | .02 max               | as Sulfur Dioxide<br>5.2 | 13        |
| Silicon                                 | 7440213         | .02 max (dust)        | 10                       | 15        |
|   |                 | (respirable fraction) |                          | 5         |
| Aluminum                                | 7429905         | .0207 (dust)          | 10                       | 15        |
|   |                 |                       | (fume) 5                 | 5         |
| Copper                                  | 7440508         | .10 max (dust)        | <b>1</b>                 | 1         |
|   |                 |                       | (fume) .2                | .1        |
| Chromium                                | 7440473         | .05 max               | <b>.</b> 5               | 1         |
| Molybdenum                              | 7439987         | .05 max               | 10                       | 15        |
| Section 313 Supplier Information        |                 |                       |                          |           |
| THIS PRODUCT DOES NOT CONTA             | IN TOXIC CHEMIC | CALS SUBJECT TO THE   | REPORTING REQUIR         | EMENTS OF |
|   |                 |                       | KNOW ACT OF ADD          |           |

SECTION 313 OF THE EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT OF 1986 AND OF 40 CFR 372

> Health = 1Fire = 0Reactivity = 0

### 2. Physical Data

NFPA

Boiling Point: N/A Vapor Pressure (mm Hg): N/A Vapor Density (Air = 1): N/A Solubility in Water: Insoluble

Specify Gravity (H<sub>2</sub>O = 1): N/A Melting Point: N/A Evaporation Rate (Butyl Acetate = 1): N/A Appearance and Odor: Welding Electrode - No Noticeable Odor

### 3. Health Hazard Data

Primary Route(s) of Entry: (In the Form of Dust and/or Fumes Only) Inhalation? Yes Skin? No \*UV Exposure Carcinogenicity: NIF NTP?

Ingestion? No

IARC?

**OSHA** Regulated

#### Acute Effects of Overexposure:

EYES: Local Irritation

SKIN: Local Irritation

INHALATION: Excessive exposure to fume may cause a sweet or metallic taste in the mouth, immediate dryness and irritation of the throat, tightness of the chest, and coughing. Several hours later, symptoms may progress to fever, malaise, perspiration, frontal headache, muscle cramps, low back pain, occasionally blurred vision, nausea, and vomiting. Pulmonary congestion, shortness of breath and symptoms of oxygen deficiency may also develop.

INGESTION: Nausea, Vomiting, and Purging

EXPOSURE TO UV: Exposure to UV Radiation can result in keratoconjunctivitis, also known as welders flash. Symptoms include inflammation, blurred vision, and headache.

#### **Chronic Effects of Exposure:**

SKIN: NO

INHALATION: Electrodes designed for welding underwater with fresh air supplied to diver. Welding above water may cause a sweet or metallic taste in the mouth. Do not use this electrode above water.

#### Toxicity Data:

Job task data extrapolated over an eight hour TWA. Conditions for worst case scenario.

- -Mild irritation: 300 ug/3 days. Intermittent skin contact
- -Lowest toxic concentration: 124 mg/m<sup>3</sup>, 50 minute inhalation

#### Medical Conditions Aggravated by Exposure:

Respiratory illness/diseases, neurological and skin disorders/diseases.

#### **Emergency and First Aid Procedures:**

EYE CONTACT: Flush with running water, including under the eyelids, for about 15 minutes. If irritation persists, seek medical attention.

SKIN CONTACT: Wet Welding Electrode intended for underwater use only. Skin contact not applicable

INHALATION: Wet welding electrode intended for underwater welding only. Exposure above water, remove victim from exposure area to fresh air immediately. If breathing has stopped, give artificial respiration. Keep the affected person warm and at rest. Seek medical attention immediately.

INGESTION: If victim is conscious dilute the stomach and induce vomiting. Qualified medical personnel should remove remaining chemicals by gastric lavage. Seek medical attention immediately.

# 4. Fire and Explosion Hazard Data

|                                 | <u>X</u> Stable       | area.                          |                                     |
|---------------------------------|-----------------------|--------------------------------|-------------------------------------|
| Stability:                      | Unstable              | Conditions to Avoid: Allowing  | g gases to be trapped in a confined |
| 5. Reactivity Data              |                       |                                |                                     |
| Unusual Fire and Explosion Ha   | zards: Oil and grease | on torches can cause a violent | reaction in the presence of oxygen. |
| Special Fire Fighting Procedure | es: N/A               |                                |                                     |
| Extinguishing MEDIA: N/A        |                       |                                |                                     |
| Flammable Limits: N/A           | I                     | _EL                            | UEL                                 |
| Flash Point (Method Used): NC   | JNE                   |                                |                                     |

**Incompatibility (Materials to Avoid):** Oil and grease on torch can cause a violent reaction in the presence of unburned oxygen.

| Hazardous Decomposition or By-Products |                  |                     |  |
|--|------------------|---------------------|--|
| Hazardous Polymerization:              | Will Occur       | Conditions to Avoid |  |
|  | X Will Not Occur |                     |  |

# 6. Spill or Leak Procedures

Steps to be Taken in Case Material is Released or Spilled: N/A

Waste Disposal Method: Comply with all local, state, and federal regulations for proper disposal.

# 7. Special Protection Information

**Respiratory Protection:** Air purifying respirator if area is unventilated and local exhaust not available.

Ventilation: Diving Helmet with supplied air

Protective Gloves: Rubber Gloves to prevent electrical shock

Eye Protection: 8 - 10 minimum welding shield

Other Protective Equipment: Commercial diving equipment with communications

### 8. Special Precautions

Precautions to be Taken in Handling and Storing: N/A

Other Precautions: Properly ground welding equipment

### 9. Other Information

Use proper procedure at all times as specified by the following:

- 1. Your company's Safe Practices Manual
- 2. OSHA 1910 Subpart Q, Cutting and Welding Regulations
- 3.. ANSI Z49.1 Safety in Welding and Cutting
- 4. Other applicable references ADC Consensus Standards
- 5. U.S. Navy Welding and Burning Manual

#### ABBREVIATIONS

| NA - Not Applicable | NE - Not Established       |
|---------------------|----------------------------|
| NL - Not Listed     | NIF - No Information Found |