Material Safety Data Sheet

SECTION 1 - PRODUCT IDENTIFICATION AND USE

PRODUCT IDENTIFIER: ARCAIR SEA-WELD ELECTRODE
CATALOG NUMBERS: 42-024-002, 42-984-004, 42-034-007
PRODUCT USE: Underwater welding electrode
MANUFACTURERS NAME: TWECO Products, Inc.    EMERGENCY PHONE #: (316) 946-8308
STREET ADDRESS: 4200 West Harry St.        P.O.Box 12250
CITY: Wichita        STATE: Kansas        ZIP CODE: 67277
PREPARED BY: Dennis Wilson                 PHONE NUMBER: (316) 946-8308
DATE PREPARED: July 1989                   DATE REVISED: January 4, 2000

SECTION 2 - HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>HAZARDOUS INGREDIENTS</th>
<th>%/RANGE</th>
<th>CAS NUMBER</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel</td>
<td>70-90</td>
<td>Not Assigned</td>
<td>N/Av.</td>
<td>5mg/m3</td>
</tr>
<tr>
<td>including: Nickel</td>
<td>&lt; 0.2</td>
<td>7440-02-0</td>
<td>1mg/m3</td>
<td>1mg/m3</td>
</tr>
<tr>
<td>Chromium</td>
<td>&lt; 0.2</td>
<td>7440-47-3</td>
<td>0.5mg/m3</td>
<td>0.5mg/m3</td>
</tr>
<tr>
<td>Manganese</td>
<td>&lt;2</td>
<td>7439-96-5</td>
<td>1mg/m3</td>
<td>1mg/m3</td>
</tr>
<tr>
<td>Iron Oxide</td>
<td>5-15</td>
<td>1309-37-1</td>
<td>10mg/m3 Fume</td>
<td>5mg/m3 Fume</td>
</tr>
<tr>
<td>Aluminum</td>
<td>&lt;1</td>
<td>7429-90-5</td>
<td>N.App</td>
<td>5mg/m3 Fume</td>
</tr>
</tbody>
</table>

When placed into underwater service, an electric arc is formed as in welding, generating intense heat, ultra-violet (UV) rays, fumes and gases. When used as intended for underwater welding, exposure to UV rays and electrical shock potential are the most likely sources of risk to health. When not in service, the electrodes pose no significant hazard.

SECTION 313. SUPPLIER INFORMATION


<table>
<thead>
<tr>
<th>CAS NUMBER</th>
<th>CHEMICAL NAME</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>7740-02-0</td>
<td>Nickel</td>
<td>0.18%</td>
</tr>
<tr>
<td>7439-96-5</td>
<td>Manganese</td>
<td>1.1%</td>
</tr>
</tbody>
</table>

CALIFORNIA PROPOSITION 65 CHEMICALS:
This product contains 0.18% Nickel, 0.0056% Cadmium, and .1856% Chromium, chemicals known to the State of California to cause cancer or reproductive toxicity.

SECTION 3 - PHYSICAL DATA

PHYSICAL STATE: Solid    ODOR AND APPEARANCE: Yellow plastic over aluminum over light-brown flux-coated steel rod. VAPOR PRESSURE(mm Hg): N.App.
SOLUBILITY: Insoluble

SECTION 4 - FIRE AND EXPLOSION DATA

LEL: N.App. UEL: N.App. UNUSUAL FIRE AND EXPLOSION HAZARDS: None
N.App.: NON APPLICABLE; N.AV.: NOT AVAILABLE; N.EST.: NOT ESTABLISHED
N.F.P.A. RATING SYSTEM: 0 - INSIGNIFICANT; 1 - SLIGHT; 2 - MODERATE;
3 - HIGH; 4 - EXTREME
Health = 1     Flammibility = 0     Reactivity = 0     Special = none
WHMIS CLASSIFICATION: CLASS "D"     DIVISION 2     SUB-DIVISION "G"

SECTION 5 - REACTIVITY DATA
CHEMICAL STABILITY: Yes [X] No [ ] IF NO, CONDITIONS TO AVOID: N.App.
INCOMPATIBILITY WITH OTHER SUBSTANCES: Yes [ ] No [X] IF YES, WHICH ONES?
None known    HAZARDOUS POLYMERIZATION: Will Occur [ ] Will Not Occur [X]
CONDITIONS TO AVOID: N.App.    HAZARDOUS DECOMPOSITION PRODUCTS: Iron oxide
fumes are generated during cutting operations but pose no problem for the
diver/welder

SECTION 6 - HEALTH HAZARD DATA
ROUTE OF ENTRY:  SKIN CONTACT [ ]   SKIN ABSORPTION [ ]    EYE CONTACT [ ]
INHALATION [ ]    INGESTION [ ]    U.V. EXPOSURE [X]
EFFECTS OF ACUTE/CHRONIC EXPOSURE TO PRODUCT: Exposure to UV radiation
from the cutting arc can result in keratoconjunctivitis, also known as
welders flash.    CARCINOGENICITY: Yes    SIGNS AND SYMPTOMS OF EXPOSURE:
Inflammation, blurred vision and headache    MEDICAL CONDITIONS GENERALLY
AGGRAVATED BY EXPOSURE: N.App.    EMERGENCY AND FIRST AID PROCEDURES: Seek
medical attention, preferably an eye specialist.

SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE
LEAK AND SPILL PROCEDURE: Pick up spent ends when cool
WASTE DISPOSAL METHOD: Solid landfill if local regulations allow.
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Store in dry area
OTHER PRECAUTIONS:    CUTTING WARNINGS: CAUTION! ELECTRIC SHOCK CAN KILL.
ARC RAYS CAN INJURE EYES. Train the operator not to touch electrical parts.
Wear an underwater suit.

SECTION 8 - CONTROL MEASURES
RESPIRATORY PROTECTION: For underwater operations only    GLOVES: Butyl Rubber
RESPIRATOR: As required for underwater operations    EYE: Filter lens for U.V.
protection, #12 or darker    FOOTWEAR: N.App.    CLOTHING: Suit constructed
SPECIAL: N.Est.     MECHANICAL: As required for underwater operations.
OTHER: N.App.    WORK/HYGIENIC PRACTICES: Top water personnel should avoid
surfacing fumes

THIS DATA IS OFFERED IN GOOD FAITH AS TYPICAL VALUES. THIS IS NEITHER AN
EXPRESSED NOR IMPLIED PRODUCT SPECIFICATION. RECOMMENDED HANDLING PROCEDURES
AND HYGIENE ARE BELIEVED TO BE ACCURATE, HOWEVER, THESE RECOMMENDATIONS SHOULD
BE REVIEWED IN THE SPECIFIC CONTEXT OF INTENDED USE AND DETERMINED APPROPRIATE
BY THE USER.