Material Safety Data Sheet *89-250-864/H*

SECTION 1 - PRODUCT IDENTIFICATION AND USE

PRODUCT IDENTIFIER: ARCAIR SLICE CUTTING ROD, UNCOATED CATALOG NUMBERS: 43-049-002, -003, -005, -007, -008

PRODUCT USE: Exothermic Metal Cutting

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
PPEDARED BY: Dennis Wilson PHONE NUMBER: (

PREPARED BY: Dennis Wilson PHONE NUMBER: (316) 946-8308
DATE PREPARED: July 1989 DATE REVISED: January 4, 2000

SECTION 2 - HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS %/RANGE CAS NUMBER OSHA PEL ACGIH TLV

Mild Steel 99+ Not Listed N/A Fume = 5mg/M3 including: Nickel 0.15 7740-02-0 1mg/m3 0.015mg/m3

When placed into service with a welding power source, an intense electric arc is created generating fumes, gases, and ultra-violet rays which can damage the eyes, penetrate light clothing and burn the skin. When not in service, the rods pose no particular hazard.

SECTION 313. SUPPLIER INFORMATION

THIS PRODUCT DOES $[\times]$ DOES NOT $[\]$ CONTAIN TOXIC CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF THE EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT OF 1986 AND OF 40 CFR 372.

CAS NUMBER CHEMICAL NAME % 7740-02-0 Nickel 0.15%

CALIFORNIA PROPOSITION 65 CHEMICALS

This product contains 0.15% Nickel, a chemical known to the State of California to cause cancer.

SECTION 3 - PHYSICAL DATA

PHYSICAL STATE: Solid ODOR AND APPEARANCE: Rolled steel tube, no notable odor VAPOR PRESSURE(mm Hg): N.App. VAPOR DENSITY(air=1): N.App. EVAPORATION RATE: N.App. BOILING POINT(F/C): N.App. FREEZING POINT(F/C): N.App. pH: N.App. SPECIFIC GRAVITY: N.App. SOLUBILITY: Insoluble

SECTION 4 - FIRE AND EXPLOSION DATA

FLAMMABILITY: Yes [] No [X] IF YES, MEANS OF EXTINCTION: Does not burn readily FLASHPOINT(F/C) AND METHOD: N.App. FLAMMABLE LIMIT: N.App. LEL: 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

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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 in addition to those generated by materials being cut

SECTION 6 - HEALTH HAZARD DATA

ROUTE OF ENTRY: SKIN CONTACT [] SKIN ABSORPTION [] EYE CONTACT [] INHALATION [X] INGESTION [] U.V. EXPOSURE [X]

EFFECTS OF ACUTE/CHRONIC EXPOSURE TO PRODUCT: INHALATION: When cutting certain materials (e.g., lead, cadmium, beryllium, etc.) airborne concentration may exceed TLV's causing dryness of the throat, breathing difficulty or unconsciousness. VISUAL: Exposure to ultra-violet radiation from a powered arc can result in keratonconjunctivitis (welders flash) causing inflammation, blurred vision and headache.

CARCINOGENICITY: Yes SIGNS AND SYMPTOMS OF EXPOSURE: Explained above in "Effects of Acute/Chronic Exposure to Product"

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Possibly existing respiratory conditions EMERGENCY AND FIRST AID PROCEDURES: INHALATION: Remove to fresh air and seek medical attention. VISUAL: Consult a physician - 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 a low humidity environment.

OTHER PRECAUTIONS: Avoid breathing vapors! Intense heat generated when in operation!

SECTION 8 - CONTROL MEASURES

RESPIRATORY PROTECTION: NIOSH-MESA determined for fume/dust protection GLOVES: As used in conventional arc welding RESPIRATOR: As required to maintain below TLVs EYE: Face shield; filter lens for U.V. protection FOOTWEAR: Suitable for metal working CLOTHING: As used in conventional arc welding OTHER: N.App.

VENTILATION: Preferred for fume/dust reduction LOCAL EXHAUST: Preferred for fume/dust reduction MECHANICAL: To maintain below TLV's/PEL's WORK/HYGIENIC PRACTICES: Operator trained to avoid electrical shock and U.V. ray exposure.

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.