Material Safety Data Sheet *89-250-847/C*

SECTION 1 - PRODUCT IDENTIFICATION AND USE

PRODUCT IDENTIFIER: ARCAIR SLICE CUTTING ROD, FLUX COATED

CATALOG NUMBERS: 42-049-002, -003, -005 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
PREPARED 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	NIOSH TLV
Mild Steel including: Nickel	85+ 0.15	Not Listed 7740-02-0	N/AV 1mg/m3	5mg/m3 .015mg/m3
Flux Coating	<15%	Trade Secret	N.App	N.App

The major components of the flux coating are not included in any known list of hazardous materials, and the minor components are well below the Federally defined percentage required for disclosure. When not in actual service, the cutting rods pose no significant hazard.

SECTION 313. SUPPLIER INFORMATION

THIS PRODUCT DOES [X] 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: Blue flux coated, 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

Health = 1 Flammibility = 0 Reactivity = 0 Special = none

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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, product contains slight amount of carcinogenic metal. SIGNS AND SYMPTOMS OF EXPOSURE: Explained above in "Effects of Acute/Chronic Exposure to Product" MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Possibly existing respiratory 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: Sweep or pick up. Be alert to "hot ends." 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 fume/dust 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 and dust removal LOCAL EXHAUST: Preferred for fume and dust removal MECHANICAL: To maintain fume and dust below TLVs/PELS 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.