

**ARCAIR ARCWATER ELECTRODE  
MATERIAL SAFETY DATA SHEET**

02/05/00

MSDS PROVIDED BY:

STOODY INDUSTRIAL AND WELDING SUPPLY, INC.

3316 National Ave., San Diego, CA 92113

Phone: (619) 234-6750

MILITARY EMERGENCY RESPONSE NUMBER 1 (800) 851-8061

Material Safety Data Sheet  
89-250-819/B

**SECTION 1 – PRODUCT IDENTIFICATION AND USE**

PRODUCT IDENTIFIER: ARCAIR ARCWATER ELECTRODE

CATALOG NUMBERS: 42-059-006

PRODUCT USE: Underwater Arch Metal Removal

MANUFACTURERS NAME: TWECO Products, Inc.

STREET ADDRESS: 4200 West Harry St.

CITY: Wichita STATE: Kansas

PREPARED BY: Dennis Wilson

DATE PREPARED: July 1989

EMERGENCY PHONE # : (316) 946-8308

P.O. BOX 12250

ZIP CODE: 67277

PHONE NUMBER (316) 946-8308

DATE REVISED: October 1997

**SECTION 2 – HAZARDOUS INGREDIENTS**

HAZARDOUS INGREDIENTS	%/RANGE	CAS NUMBER	OSHA PEL	ACGIH TLV
Copper (coating)	Appr. 15	7440-50-8	0.2mg/m3 Fume	0.2mg/m3 Fume
Synthetic Graphite	Appr. 84	7440-44-0	3.5mg/m3	3.5mg/m3
Plasticized Vinyl	Appr. 1	Compound	N.A.P.	N.A.P.

When placed into underwater service, an electric arc is formed as in welding, generating intense heat, ultra-violet (UV) rays, fumes and gases as in conventional welding. 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**

THIS PRODUCT DOES  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  
7440-50-8

CHEMICAL NAME  
Copper

%  
Approximately 15

**SECTION 3 – PHYSICAL DATA**

PHYSICAL STATE: Solid ODOR AND APPEARANCE: White plastic over coppercoated carbon rod. No noticeable odor.

VAPOR PRESSURE: N. App.

VAPOR DENSITY (air=1): N. App. EVAPORATION RATE: BOILING POINT (FREEZING POINT) (mm Hg) N. App.

[degree]F/C) [degree]F/C): N. App. pH: N. App.

SPECIFIC GRAVITY: N. App. SOLUBILITY: Insoluble

**SECTION 4 – FIRE AND EXPLOSION DATA**

FLAMMABILITY: Yes  No  IF YES, MEANS OF EXTINCTION: Does not readily burn FLASHPOINT ([degree]

FLAMMABLE LIMIT F/C) AND METHOD: N. App.

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 Flammability = 0 Reactivity = 0 Special = none

WHMIS CLASSIFICATION: CLASS "D" DIVISION 2 SUB-DIVISION "G"

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**SECTION 5 – REACTIVITY DATA**

CHEMICAL STABILITY: Yes  No  IF NO, CONDITIONS TO AVOID: N. AP.  
IMCOMPATIBILITY WITH OTHER SUBSTANCES: Yes  No  IF YES, WHICH ONES? None known  
HAZARDOUS POLYMERIZATION: Will Occur  Will Not Occur  CONDITIONS TO AVOID: N. AP.  
HAZARDOUS DECOMPOSITION PRODUCTS: Small amounts of copper fume 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  EFFECTS OF ACUTE/CHRONIC EXPOSURE TO PRODUCT:  
Exposure to UV radiation from the cutting arc can result in keratoconjunctivitis, also known as welders flash. TOXICITY:  
CARBON: Intravenous mouse; LD50: 440 Mg/Kg, COPPER (fume): Human, Oral LDLO: 120ug/Kg  
REPRODUCTION: CARBON – Subcutaneous rat; TDLO: 167Mg/Kg (8D preg);  
COPPER: - Oral, Rat; TDLO: 1520ug/Kg (22w pre) TDLO: 1210ug/Kg (35w pre)  
CARCINOGENICITY: Not Listed SIGNS AND SYMPTOMS OF EXPOSURE: Inflammation, blurred vision and headache  
MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: None known EMERGENCY AND FIRST AID  
PROCUDURES: 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 (SPECIFY TYPE): As applicable for underwater operation  
GLOVES (SPECIFY): Butyl Rubber RESPIRATOR (SPECIFY): As required for underwater operations  
EYE (SPECIFY): Filter lens for U.V. protection, #12 or darker FOOTWEAR (SPECIFY): N. AP CLOTHING (SPECIFY) Suit  
constructed of rubber to minimize likelihood for shock OTHER (SPECIFY): N. AP. VENTILATION: As required for  
underwater operations. 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.