

ARCAIR CO SUB OF AIR PRODUCTS AND CHEMICALS INC -- AIR CARBON ARC ELECTRODE --  
3439-00-288-4048

===== Product Identification =====

Product ID: AIR CARBON ARC ELECTRODE

MSDS Date: 10/31/1990

FSC: 3439

NIIN: 00-288-4048

MSDS Number: BDTZY

=== Responsible Party ===

Company Name: ARCAIR CO SUB OF AIR PRODUCTS AND CHEMICALS INC

Address: 4200 WEST HARRY ST

Box: 12250

City: WICHITA

State: KS

ZIP: 67277

Country: US

Info Phone Num: 316-942-1421

Emergency Phone Num: 316-942-1421

Preparer's Name: DENNIS WILSON

CAGE: 09687

=== Contractor Identification ===

Company Name: ARCAIR CO SUB OF AIR PRODUCTS AND CHEMICALS INC

Address: 4200 WEST HARRY ST

Box: 12250

City: WICHITA

State: KS

ZIP: 67277

Country: US

Phone: 316-942-1421

CAGE: 09687

Company Name: SMITH S J CO INC

Address: 3707 W RIVER DR

Box: City: DAVENPORT

State: IA

ZIP: 52802-2411

Country: US

Phone: 319-324-5237

CAGE: 2N560

Company Name: TWECO PRODUCTS, INC.

Address: 4200 WEST HAR

RY ST.  
Box:12250  
City:WICHITA  
State:KS  
ZIP:67277  
Country:US  
Phone:316-946-8308;316-942-1421  
CAGE:89381

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===== Composition/Information on Ingredients =====

Ingred Name:GRAPHITE, SYNTHETIC \*  
CAS:7440-44-0  
RTECS #:FF5250100  
Fraction by Wt: 20-90%  
OSHA PEL:3.5 MG/M3 (MFR)  
ACGIH TLV:2 MG/M3 TDUST; 9192

Ingred Name:GRAPHITE, NATURAL \*  
CAS:7782-42-5  
RTECS #:MD9659600  
Fraction by Wt: 20-90%  
OSHA PEL:2.5 MG/M3 RDUST \*  
ACGIH TLV:2 MG/M3 RDUST; 9192

Ingred Name:COPPER (SARA III) \*  
CAS:  
7440-50-8  
RTECS #:GL5325000  
Fraction by Wt: 10-30%  
OSHA PEL:0.1MG/M3 FUME/1 DUST  
ACGIH TLV:0.2MG/M3 FUME; 9192  
EPA Rpt Qty:5000 LBS  
DOT Rpt Qty:5000 LBS

Ingred Name:CARBON BLACK \*/FULLY BAKED OUT  
CAS:1333-86-4  
RTECS #:FF5800000  
OSHA PEL:3.5 MG/M3 \*  
ACGIH TLV:3.5 MG/M3; 9192 \*

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===== Hazards Identification =====

Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:EXPOSURE T

O FUMES MAY CAUSE

BRONCHITIS,LUNG DEPOSITS AND TISSUE DAMAGE WHICH MAY BE IRREVERSIBLE. EXPOSURE TO ULTRA- VIOLET ARC RAYS CAN RESULT IN KERATOCONJUNCTIVITIS,CAUSING INFLAMMATION, BLURRED VISION,HEADACHE-"SUNBURN".

Explanation of Carcinogenicity:NONE OF THE CHEMICALS IN THIS PRODUCT IS LISTED BY IARC, NTP OR OSHA AS A CARCINOGEN.

Effects of Overexposure:BREATHING DIFFICULTY,HEADACHE,NAUSEA,DRYNESS OR IRRITATION OF NOSE,THROAT AND EYES. BURNING SENSATION OF SKIN OR EY

ES. UNCONSCIOUSNESS.

Medical Cond Aggravated by Exposure:PERSONS WITH A HISTORY OF RESPIRATORY DISORDERS MAY BE AT INCREASED RISK FROM EXPOSURE.

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===== First Aid Measures =====

First Aid:FOR INHALATION EXPOSURE, REMOVE TO FRESH AIR. IF BREATHING IMPAIRED, ASSISTED RESPIRATION MAY BE REQUIRED. TREAT U. V. SIMILAR TO SEVERE SUNBURN, SEEK MEDIAL ATTENTION!

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===== Fire Fighting Measures =====

Flash Point:NOT FLAMMA  
BLE

Lower Limits:NOT GIVEN

Upper Limits:NOT GIVEN

Extinguishing Media:NONFLAMMABLE. USE MEDIA AS APPROPIATE FOR SURROUNDING FIRE.

Fire Fighting Procedures:WEAR FULL PROTECTIVE CLOTHING AND NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS WITH FULL FACEPIECE OPERATED IN THE POSITIVE PRESSURE MODE.

Unusual Fire/Explosion Hazard:NONE SPECIFIED BY MANUFACTURER.

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===== Accidental Release Measures =====

Spill Release Procedures:SWEEP OR PICK UP. BE ALERT TO "HOT ENDS".

Neutralizing Agent:NONE APPLICABLE FOR THIS MATERIAL

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===== Handling and Storage =====

Handling and Storage Precautions:STORE IN DRY AREA. ELECTRODES EXPOSED TO MOISTURE MAY EXPLODE VIOLENTLY IF USED. DRY MOIST RODS BY BAKING AT 300F FOR TEN HOURS.

Other Precautions:READ AND UNDERSTAND "AMERICAN NATIONAL STANDARD Z49.1"; SUBPART Q OF OSHA 29 CFR 1910.252; "SAFETY IN WELDING AND CUTTING" BY THE AMERICAN WELDING SOCIETY.

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Exposure Controls/Personal Protection =====

Respiratory Protection: AIR SUPPLIED OR FUME RESPIRATOR MUST BE USED IF VENTILATION IS INSUFFICIENT.

Ventilation: LOCAL EXHAUST VENTILATION TO KEEP EXPOSURE BELOW TLV.

Protective Gloves: WELDER'S GLOVES

Eye Protection: WELDER'S HELMET WITH # 12 OR DARKER LENS

Other Protective Equipment: DARK, SUBSTANTIAL APRONS, FOOTWEAR SUITABLE FOR METAL WORKING.

Work Hygienic Practices: FOLLOW STANDARD HYGIENE PRACTICES OF YOUR LOCAL SHOP.

Supplemen

tal Safety and Health

TRAIN OPERATOR TO AVOID ELECTRICAL SHOCK AND EXPOSURE TO U.V. RAYS.

SAMPLE AIR TO DETERMINE EXPOSURE CONCENTRATIONS AND TO TAKE CORRECTIVE ACTION.

===== Physical/Chemical Properties =====

HCC: N1

Boiling Pt: B.P. Text: NOT GIVEN

Melt/Freeze Pt: M.P/F.P Text: NOT GIVEN

Vapor Pres: NOT GIVEN

Vapor Density: NOT GIVEN

Spec Gravity: NOT GIVEN

Evaporation Rate & Reference: NIL

Solubility in Water: INSOLUBLE

Appearance and Odor: COPPER COATED BLACK ROD. NO NOTABLE ODOR.

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid: YES

NONE SPECIFIED BY MANUFACTURER.

Stability Condition to Avoid: NONE SPECIFIED BY MANUFACTURER.

Hazardous Decomposition Products: CARBON DIOXIDE, CARBON MONOXIDE, TRACES OF COPPER FUME (OZONE, NITROGEN OXIDE FROM THE ELECTRIC ARC AND UV RAYS).

===== Disposal Considerations =====

Waste Disposal Methods: CONTACT YOUR LOCAL ENVIRO

NMENTAL OFFICER.

DISPOSE OF AT SOLID LANDFILL IF REGULATIONS ALLOW. DISPOSE OF IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS.

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