

AIRCO WELDING PRODUCTS DIV OF THE BOC GROUP INC. -- CODE-ARC 7018 MR ELECTRODES --  
3439-00-165-4186

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

Product ID:CODE-ARC 7018 MR ELECTRODES

MSDS Date:12/02/1985

FSC:3439

NIIN:00-165-4186

MSDS Number: BHFYC

=== Responsible Party ===

Company Name:AIRCO WELDING PRODUCTS DIV OF THE BOC GROUP INC.

Address:4437 E 49TH STRRET

City:CLEVELAND

State:OH

ZIP:44125-1005

Country:US

Info Phone Num:216-641-8790

Emergency Phone Num:216-641-879

0

CAGE:83923

=== Contractor Identification ===

Company Name:AIRCO WELDING PRODUCTS DIV OF THE BOC GROUP INC.

Address:4437 E 49TH STRRET

City:CLEVELAND

State:OH

ZIP:44125-1005

Country:US

Phone:216-641-8790

CAGE:83923

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

Ingred Name:IRON

CAS:7439-89-6

RTECS #:NO4565500

OSHA PEL:10 MG/M3(IRON OXIDE)

ACGIH TLV:5 MG/M3 (IRON OXIDE)

Ingred Name:TITANIUM DIOXIDE

CAS:13463-67-7

RTECS #:XR2275000

OSHA PEL:15 MG/M3 TDUST

ACGIH TLV:10 MG/

M3 TDUST; 9293

Ingred Name:SILICON

CAS:7440-21-3

RTECS #:VW0400000

OSHA PEL:15 MG/M3 TDUST

ACGIH TLV:10 MG/M3 TDUST; 9293

Ingred Name:MANGANESE (SARA III)

CAS:7439-96-5

RTECS #:OO9275000

OSHA PEL:(C) 5 MG/M3 DUST

ACGIH TLV:5 MG/M3 DUST 9293

Ingred Name:SODIUM SILICATE

CAS:1344-09-8

Ingred Name:CALCIUM FLUORIDE

CAS:7789-75-5

RTECS #:EW1760000

OSHA PEL:2.5 MG/M3 (F)

ACGIH TLV:2.5 MG/M3 (F); 8990

Ingred Name:POTASSIUM TITANATE

CAS:12030-97-6

===== Hazards Identification =====  
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Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:SHORT TERM EXPOSURE TO WELDING FUMES, GASES OR DUST MAY RESULT IN DISCOMFORT SUCH AS DIZZINESS, NAUSEA, FEVER, DRYNESS AND/OR IRRITATION OF NOSE, THROAT AND EYES. SKIN SENSITIVITY MAY ALSO BE NOTED. A CUTE EXPOSURE FROM SOME TOXIC GASES MAYCAUSE PULMONARY EDEMA, ASPHYXIATION AND EXCESSIVE EXPOSURE CAN BE FATAL.

Effec

ts of Overexposure:EXPOSURE TO WELDING FUMES MAY RESULT IN DISCOMFORT SUCH AS DIZZINESS, NAUSEA, FEVER, DRYNESS AND/OR IRRITATION OF NOSE, THROAT AND EYES. SKIN SENSITIVITY MAY ALSO BE NOTED. WATERY EYES, HEADACHE, BREA THING DIFFICULTY, FREQUENT COUGHING AND/OR CHEST PAINS MAY OCCURE FROM ACUTE EXPOSURE. TOXIC GASES CAN BE FATAL.

Medical Cond Aggravated by Exposure:SOME WORKERS MAY BE AFFECTED BY A PRE-EXISTING CONDITION OR OTHER OCCUPATIONAL ILLNESS BECAUSE OF THE W

## IDE VARIATION IN INDIVIDUAL SUSCEPTIBILITIES.

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

First Aid:IN CASE OF ELECTRICAL SHOCK, TURN OFF POWER PRIOR TO REMOVAL FROM EXPOSURE AREA AND ADMINISTRATION OF FIRST AID. REMOVE FROM EXPOSURE AREA AND CALL FOR MEDICAL AID. ADMINISTER OXYGEN IF BREATHING IS DIFFICULT. IF NOT BREATHING, BEGIN ARTIFICIAL RESPIRATION. IF NO DETECTABLE PULSE, BEGIN EXTERNAL HEART MASSAGE. EMPLOY FIRST AID TECHNIQUES RECOMMENDED BY THE AMERICAN RED CROSS.

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

Flash Point:NONE

Extinguishing Media:NOT APPLICABLE;USE CARBON DIOXIDE, FOAM, DRY CHEMICAL, OR WATER FOG IN CASE OF SURROUNDING FIRE.

Fire Fighting Procedures:FIRE FIGHTERS SHOULD USE NIOSH APPROVED SCBA & FULL PROTECTIVE EQUIPMENT WHEN FIGHTING CHEMICAL FIRE. USE WATER SPRAY TO COOL NEARBY CONTAINERS EXPOSED TO FIRE.

Unusual Fire/Explosion Hazard:NON-FLAMMABLE. WELDING ARC AND SPARKS CAN IGNITE COMBUSTIBLES AND FLAMMABLE PRODUCTS.

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

Spill Release Procedures:CLEAN UP ANY GRINDING DUST OR WASTE RESIDUES AND PLACE IN SUITABLE DOT APPROVED CONTAINERS AND DISPOSE OF IN FULL COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS. AVOID INHALATION AND SKIN EXPOSURE.

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

Handling and Storage Precautions:WEAR GLOVES AND FLAME RETARDANT

CLOTHING WHEN CUTTING, GRINDING OR WELDING. DO NOT EXPOSE SKIN TO RADIATION WHEN HOT CUTTING OR WELDING.

Other Precautions:PROVIDE PROTECTIVE SCREENS TO SHIELD OTHERS. WHEN ELECTRODES AND FLUXES ARE CONSUMED, THE FUME AND GAS DECOMPOSITION PRODUCTS GENERATED ARE DIFFERENT IN FORM FROM THE INGREDIENTS LISTED. NEW COMPOUNDS NOT IN THE ELECTRODES MAY FORM.

### ===== Exposure Controls/Personal Protection =====

Respiratory Protection:USE WELD FUME RESPIRATOR OR AIR SUPPLY

UPPLIED

RESPIRATOR WHEN CUTTING, GRINDING OR WELDING IN A CONFINED SPACE OR WHERE LOCAL EXHAUST OR GENERAL VENTILATION DOES NOT KEEP EXPOSURE BELOW RECOMMENDED LIMITS. USE ONLY NIOSH APPROVED RESPIRATORS.

Ventilation:USE ENOUGH VENTILATION WHEN CUTTING, GRINDING OR WELDING TO KEEP THE DUST, FUMES & GASES FROM THE WORKERS BREATHING ZONE

Protective Gloves:WELDERS LEATHER GLOVES

Eye Protection:OSHA APPROVED GOGGLES/FACE SHIELD W/LENS

Other Protective Equipment:FLAME RETARDANT CLOTH

ING WHEN CUTTING,

GRINDING OR WELDING. DO NOT EXPOSE SKIN TO RADIATION WHEN HOT CUTTING OR WELDING.

Work Hygienic Practices:WASH THOROUGHLY BEFORE EATING OR SMOKING.

LAUNDER CONTAMINATED CLOTHING BEFORE REUSE.

Supplemental Safety and Health

WELDING AND HOT CUTTING FUMES & GASES CANNOT BE CLASSIFIED SIMPLY.

THEIR COMPOSITION AND QUANTITY ARE DEPENDENT ON THE METAL BEING WELDED, THE PROCEDURES, PROCESSES AND THE TYPE OF WIRE OR ELECTRODES USED. OTHER INFLUENCING FACTORS AR

E THEPRESENCE OF

CONTAMINANTS. CHLORINATED SOLVENTS MAY DECOMPOSE TO TOXIC GASES.

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

HCC:N1

Solubility in Water:INSOLUBLE.

Appearance and Odor:FLUX COATING ON A SOLID METAL CORE WIRE IN CUT LENGTHS.

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

Stability Indicator/Materials to Avoid:YES

NONE NOTED

Stability Condition to Avoid:NONE NOTED

Hazardous Decomposition Products:WELDING AND CUTTING OPERATIO

N MAY

INCLUDE OXIDES OF THE METALS, CHROMATES, FLUORIDES, COMPLEX METALLICS, AND OZONE.

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

Waste Disposal Methods:DISPOSE I/A/W FEDERAL, STATE & LOCAL REGULATIONS

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