

ALLOY RODS CORPORATION -- ATON ARC COVERED LOW HYDROGEN ELECTRODES. --
3439-00-486-8262

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

Product ID:ATON ARC COVERED LOW HYDROGEN ELECTRODES.

MSDS Date:04/04/1988

FSC:3439

NIIN:00-486-8262

MSDS Number: BMDRP

=== Responsible Party ===

Company Name:ALLOY RODS CORPORATION

Address:1500 KAREN LN.

Box:517

City:HANOVER

State:PA

ZIP:17331

Country:US

Info Phone Num:717-63

7-8911

Emergency Phone Num:717-637-8911

CAGE:84021

=== Contractor Identification ===

Company Name:ESAB GROUP INC

Address:801 WILSON AVENUE

Box:517

City:HANOVER

State:PA

ZIP:17331

Country:US

Phone:717-637-8911 OR 800-933-7070

CAGE:84021

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

Ingred Name:IRON

CAS:7439-89-6

RTECS #:NO4565500

Other REC Limits:NONE SPECIFIED

OSHA PEL:5 MG/M3

ACGIH TLV:5 MG/M3 AS FE2O3

Ingred Name:CHROMIUM (SARA III)

CAS:7440-47-3

RTECS #:GB4200000

Ot

her REC Limits:NONE SPECIFIED
OSHA PEL:1 MG/M3
ACGIH TLV:0.5 MG/M3; 9192
EPA Rpt Qty:1 LB
DOT Rpt Qty:1 LB

Ingred Name:SILICON
CAS:7440-21-3
RTECS #:VW0400000
Other REC Limits:NONE SPECIFIED
OSHA PEL:15 MG/M3 TDUST
ACGIH TLV:10 MG/M3 TDUST; 9293

Ingred Name:COPPER (SARA III)
CAS:7440-50-8
RTECS #:GL5325000
Other REC Limits:NONE SPECIFIED
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:SODIUM METASILICATE, ANHYDROUS
CAS:6834-92
-0
RTECS #:VV9275000
Other REC Limits:NONE SPECIFIED

Ingred Name:CALCIUM CARBONATE (MARBLE) (LIMESTONE)
CAS:1317-65-3
RTECS #:EV9580000
Other REC Limits:NONE SPECIFIED
OSHA PEL:15 MG/M3 TDUST
ACGIH TLV:10 MG/M3 TDUST; 9192

Ingred Name:TITANIUM DIOXIDE
CAS:13463-67-7
RTECS #:XR2275000
Other REC Limits:NONE SPECIFIED
OSHA PEL:15 MG/M3 TDUST
ACGIH TLV:10 MG/M3 TDUST; 9293

Ingred Name:MANGANESE (SARA III)
CAS:7439-96-5
RTECS #:OO9275000
Other REC Limits:NONE SPECIFIED
OSHA PEL:(C) 5 MG/M3 DUST
A

CGIH TLV:5 MG/M3 DUST 9293

Ingred Name:NICKEL (SARA III)
CAS:7440-02-0
RTECS #:QR5950000
Other REC Limits:NONE SPECIFIED
OSHA PEL:1 MG/M3
ACGIH TLV:1 MG/M3; 9192

Ingred Name:MOLYBDENUM
CAS:7439-98-7
RTECS #:QA4680000
Other REC Limits:NONE SPECIFIED
OSHA PEL:15 MG/M3 TDUST
ACGIH TLV:10 MG/M3; 9293

Ingred Name:POTASSIUM SILICATE
CAS:1312-76-1
Other REC Limits:NONE SPECIFIED

Ingred Name:CALCIUM FLUORIDE
CAS:7789-75-5
RTECS #:EW1760000
Other REC Limits:NONE SPECIFIED
OSHA PEL:2.5 MG/M3 AS F
ACG
IH TLV:2.5 MG/M3 AS F

Ingred Name:POTASSIUM ALUMINUM SILICATE (FELDSPAR)
CAS:68476-25-5
Other REC Limits:NONE SPECIFIED
ACGIH TLV:2 MG/M3

Ingred Name:ZIRCONIUM(IV) SILICATE
CAS:14940-68-2
RTECS #:ZH9000000
Other REC Limits:NONE SPECIFIED
OSHA PEL:5MG/M3 AS ZR
ACGIH TLV:5MG/M3 AS ZR

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

LD50 LC50 Mixture:UNCLASSIFIED WELDING FUMES=5MG/M3 PEL
Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO
Reports of Carcinogenicity:NTP:Y

ES IARC:YES OSHA:NO

Health Hazards Acute and Chronic:ACUTE: DIZZINESS, NAUSEA; DRYNESS OR IRRITATION OF NOSE, THROAT, OR EYES. CHRONIC: OVEREXPOSURE MAY LEAD TO SIDEROSIS (IRON DEPOSITS IN THE LUNGS) AND IS BELIEVED BY SOME INVESTIGATORS TO AFFECT PULMONARY FUNCTIONS. ARC RAYS CAN INJURE EYES AND BURN SKIN.

Explanation of Carcinogenicity:WELDING FUMES CANNOT BE CLASSIFIED SIMPLY. THEIR COMPOSITION AND QUANTITY ARE DEPENDENT UPON THE METAL BEING WELDED.

Effects of Overexposure:

OVEREXPOSURE TO WELDING FUMES MAY RESULT IN DISCOMFORT SUCH AS: DIZZINESS, NAUSEA, OR DRYNESS AND IRRITATION OF NOSE, THROAT, OR EYES. LONG TERM OVEREXPOSURE MAY LEAD TO SIDEROSIS (IRON DEPOSITS IN THE LUNGS) AND IS BELIEVED BY SOME INVESTIGATORS TO AFFECT PULMONARY FUNCTION. ARC RAYS CAN INJURE EYES AND BURN SKIN.

Medical Condition Aggravated by Exposure:AGGRAVATION OF PRE-EXISTING RESPIRATORY OR ALLERGIC CONDITIONS MAY OCCUR IN SOME WORKERS.

=====

=== First Aid Measures =====

First Aid:CALL FOR MEDICAL AID. EMPLOY FIRST AID TECHNIQUES RECOMMENDED BY THE AMERICAN RED CROSS.

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

Extinguishing Media:USE WATER FOG, CARBON DIOXIDE, FOAM, OR DRY CHEMICAL.

Fire Fighting Procedures:WEAR FIRE FIGHTING PROTECTIVE EQUIPMENT AND A FULL FACED SELF CONTAINED BREATHING APPARATUS. COOL FIRE EXPOSED CONTAINERS WITH WATER SPRAY.

Unusual Fire/Explosion Hazard:

COMBUSTION OR HEAT OF FIRE MAY PRODUCE HAZARDOUS DECOMPOSITION PRODUCTS AND VAPORS. FUMES AND GASES CAN BE DANGEROUS TO YOUR HEALTH.

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

Spill Release Procedures:MANUFACTURER STATE NOT APPLICABLE.

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

Handling and Storage Precautions:THESE PRODUCTS AS SHIPPED ARE NONHAZARDOUS, NONFLAMMABLE, AND NONREACTIVE. WELDING ARC AND SPARKS CAN IGNITE COMB

USTIBLES.

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 RESPIRABLE FUME RESPIRATOR OR AIR SUPPLIED RESPIRATOR WHEN WELDING IN CONFINED SPACE OR WHERE LOCAL EXHAUST OR VENTILATIO

N DOES NOT KEEP EXPOSURE BELOW TLV.

Ventilation:USE ENOUGH VENTILATION, LOCAL EXHAUST AT THE ARC, OR BOTH TO KEEP FUMES BELOW TLV. TRAIN WORKER TO KEEP HEAD FROM FUMES.

Protective Gloves:WELDERS LEATHER GLOVES

Eye Protection:USE FACE SHIELD WITH FILTER LENS.

Other Protective Equipment:WEAR HEAD, HAND, AND BODY PROTECTION WHICH HELP TO PREVENT INJURE FROM RADIATION, SPARKS, AND ELECTRICAL SHOCK.

Work Hygienic Practices:WASH THOROUGHLY BEFORE EATING OR SMOKING. LAUNDER CONTAMINATIE

D 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 ARE THEPRESENCE OF CONTAMINANTS. CHLORINATED SOLVENTS MAY DECOMPOSE TO TOXIC GASES.

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

HCC:N1

Appearance and Odor:NOT DESCRIBED BY THE MANUFACTURER.

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

Stability Indicator/Materials to Avoid:YES

STRONG OXIDIZING AGENTS

Stability Condition to Avoid:HIGH HEAT, OPEN FLAMES AND OTHER SOURCES OF IGNITION

Hazardous Decomposition Products:WELDING AND CUTTING OPERATION MAY INCLUDE OXIDES OF THE METALS, CHROMATES, FLUORIDES, COMPLEX METALLICS, AND OZONE.

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

Waste Disposal Methods:CONSUL

T YOUR LOCAL ENVIRONMENTAL OFFICER.

PREVENT WASTE FROM CONTAMINATING SURROUNDING ENVIRONMENT. DISCARD ANY PRODUCT, RESIDUE, DISPOSABLE CONTAINER, OR LINER IN AN ENVIRONMENTALLY ACCEPTABLE MANNER , IN FULL COMPLIANCE WITH THE REGULATIONS.

Disclaimer (provided with this information by the compiling agencies):

This information is formulated for use by elements of the Department of Defense. The United States of America in no manner whatsoever, expressly or implied, warrants this information to be accurate and disclaims all liability for its use. Any person utilizing this document should seek competent professional advice to verify and assume responsibility for the suitability of this information to their particular situation.