

ALLOY RODS CORPORATION -- ATOM ARC COVERED LOW HYDROGEN ELECTRODE --  
3439-01-043-0241

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

Product ID:ATOM ARC COVERED LOW HYDROGEN ELECTRODE

MSDS Date:04/04/1988

FSC:3439

NIIN:01-043-0241

MSDS Number: BSFJX

=== Responsible Party ===

Company Name:ALLOY RODS CORPORATION

Address:WILSON AVENUE

Box:517

City:HANOVER

State:PA

ZIP:17331

Country:US

Info Phone Num:717-637-8911

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:7439-86-6

RTECS #:NO6925000

Other REC Limits:NONE RECOMMENDED

Ingred Name:CHROMIUM (SARA III)

CAS:7440-47-3

RTECS #:GB4200000

Other REC Limits:NONE RECOMMENDED

OSHA PEL:1 MG/M3

ACGIH TLV:0.5 MG/M3; 9293

EPA Rpt Qty:1 LB

DOT Rpt Qty:1 LB

Ingred Name:SILICON

CAS:7440-21-3

RTECS #:VW0400000

Other REC Limits:NONE RECOMMENDED

OSHA PEL:10 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 RECOMMENDED

OSHA PEL:0.1MG/M3 FUME/1 DUST

ACGIH TLV:0.2MG/M3 FUME; 9293

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

RECOMMENDED

OSHA PEL:2 MG/M3 8HR

ACGIH TLV:C; 2 MG.M3

Ingred Name:CALCIUM CARBONATE (MARBLE) (LIMESTONE)

CAS:1317-65-3

RTECS #:EV9580000

Other REC Limits:NONE RECOMMENDED

OSHA PEL:15 MG/M3 TDUST

ACGIH TLV:10 MG/M3 TDUST; 9293

Ingred Name:TITANIUM DIOXIDE

CAS:13463-67-7

RTECS #:XR2275000

Other REC Limits:NONE RECOMMENDED

OSHA PEL:10 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 RECOMMENDED

OSHA PEL:5 MG/M3 DU

ST  
ACGIH TLV:5 MG/M3 DUST 9293

Ingred Name:NICKEL (SARA III)  
CAS:7440-02-0  
RTECS #:QR5950000  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:1 MG/M3  
ACGIH TLV:1 MG/M3; 9293

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

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

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

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

Ingred Name:ZIRCONIUM SILICATE  
Other REC Limits:NONE RECOMMENDED

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

LD50 LC50 Mixture:TLV: 5 MG/M3 WELDING FUME  
Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO  
Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:NO  
Health Hazards Acute and Chronic:FUMES AND GASES CAN B

E DANGEROUS TO  
YOUR HEALTH. ACUTE: OVEREXPOSURE TO WELDING FUMES MAY RESULT IN  
DISCOMFORT SUCH AS IRRITATION OF NOSE, THROAT OR EYES. CHRONIC:  
OVEREXPOSURE MAY LEAD TO SIDEROSIS ( IRON DEPOSITS IN THE LUNG) AND  
IS BELIEVED BY SOME INVESTIGATORS TO AFFECT PULMONARY FUNCTION.  
Explanation of Carcinogenicity:CHROMIUM & NICKEL ARE BOTH REGULATED BY  
NTP & IARC. CHROMIUM IS REGULATED BY OSHA.  
Effects of Overexposure:OVEREXPOSURE TO WELDING FUME MAY RESULT IN  
DIZZINESS, NAUSEA, O  
R DRYNESS. ARC RAYS CAN INJURE EYES AND BURN  
SKIN. ELECTRIC SHOCK CAN KILL.  
Medical Cond Aggravated by Exposure:AGGRAVATION OF PREEXISTING  
RESPIRATORY OR ALLERGIC CONDITONS 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:NONE SPECIFIED BY MANUFACTU  
RER.  
Fire Fighting Procedures:NONFLAMMABLE.  
Unusual Fire/Explosion Hazard:WELDING ARC & SPARKS CAN IGNITE  
COMBUSTIBLES. SEE Z-49.1 REFERENCED IN SECTION VII.

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

Handling and Storage Precautions:NONE SPECIFIED BY MANUFACTURER.  
Other Precautions:TRAIN THE WELDER NOT TO TOUCH LIVE ELECTRICAL PARTS  
AND TO INSULATE HIMSELF FROM WORK AND GROUND.

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

Respiratory P  
rotection:USE RESPIRABLE FUME RESPIRATOR OR AIR SUPPLIED  
RESPIRATOR WHEN HANDLING IN CONFINED SPACE OR WHERE LOCAL EXHAUST  
OR VENTILATION DOES NOT KEEP EXPOSURE BELOW TLV.  
Ventilation:USE ENOUGH VENTILATION, LOCAL EXHAUST AT THE ARC, OR BOTH,  
TO KEEP THE FUMES AND GASES BELOW THE TLV'S IN BREATHING ZONE  
Protective Gloves:WELDERS GLOVES.  
Eye Protection:WEAR HELMET/FACESHIELD WITH FILTER LENS.  
Other Protective Equipment:WEAR HEAD, HAND & BODY PROTECTION WHICH HELP  
TO PREVENT INJURY

FROM RADIATION, SPARKS & ELECTRICAL SHOCK. SEE  
ANSI Z-49.

Work Hygienic Practices:TRAIN THE WELDER NOT TO TOUCH LIVE ELECTRICAL  
PARTS AND TO INSULATE HIMSELF FROM WORK AND GROUND.

Supplemental Safety and Health

TRAIN WELDER TO KEEP HEAD OUT OF FUMES. PROVIDE PROTECTIVE SCREENS AND  
FLASH GOGGLES, IF NECESSARY, TO SHIELD OTHERS.

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

HCC:N1

Appearance and Odor:ATOM ARC COVERED LOW HYDROGEN ELECTRODES.

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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:WELDING FUMES CANNOT BE CLASSIFIED  
SIMPLY. THEIR COMPOSITION ARE BASED ON THE METAL, PROCESS,  
PROCEDURE & ELECTROD USED.

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

Waste Disposal Methods:PREVENT WASTE FROM CONTAMINATING SURROUNDING  
ENVIRONM

ENT. DISCARD ANY PRODUCT, RESIDUE, DISPOSABLE CONTAINER, OR  
LINER IN AN ENVIRNMENTALLY ACCEPTABLE MANNER, IN FULL COMPLIANCE  
WITH FEDERAL, STATE AN D LOCAL REGULATION.

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