

ALLOY RODS CORPORATION -- 8019 ARC COVERED LOW HYDROGEN ELECTRODES --
3439-00-853-2716

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

Product ID:8019 ARC COVERED LOW HYDROGEN ELECTRODES

MSDS Date:04/04/1988

FSC:3439

NIIN:00-853-2716

MSDS Number: BFSTN

=== Responsible Party ===

Company Name:ALLOY RODS CORPORATION

Address:WILSON AVENUE

Box:517

City:HANOVER

State:PA

ZIP:17331

Country:US

Info Phone Num:717-637-89

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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

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

Ingred Name:IRON

CAS:7439-89-6

RTECS #:NO4565500

Other REC Limits:5MG/M*3

OSHA PEL:10MG/M*3

ACGIH TLV:5MG/M*3

Ingred Name:SILICON

CAS:7440-21-3

RTECS #:VW0400000

Other REC Limits:10MG/M*3

OSHA PEL

:15 MG/M3 TDUST
ACGIH TLV:10 MG/M3 TDUST; 9293

Ingred Name:SODIUM SILICATE
CAS:6834-92-0
RTECS #:VV9275000
OSHA PEL:5MG/M*3 (RESP. DUST)
ACGIH TLV:0.1MG/M*3(RESP.DUST)

Ingred Name:CALCIUM CARBONATE (MARBLE) (LIMESTONE)
CAS:1317-65-3
RTECS #:EV9580000
Other REC Limits:10MG/M*3
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:10MG/M*3
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:5MG/M*3 (C)
OSHA PEL:(C) 5 MG/M3 DUST
ACGIH TLV:5 MG/M3 DUST 9293

Ingred Name:NICKEL (SARA III)
CAS:7440-02-0
RTECS #:QR5950000
OSHA PEL:1 MG/M3
ACGIH TLV:1 MG/M3; 9192

Ingred Name:POTASSIUM SILICATE
CAS:1312-76-1
OSHA PEL:5MG/M*3 (RESP.DUST)
ACGIH TLV:0.1MG/M*3(RESP.DUST)

Ingred Name:CALCIUM FLUORIDE
CAS:7789-75-5
RTECS #:EW1760000
Other REC Limits:2.5MG/M*3
OSHA PEL:2.5 MG/M3 (F)
ACGIH TLV:2.5 MG/M3 (F); 8990

Ingred Name:POTASS

IUM FELDSPAR
Other REC Limits:10MG/M*3(NUISANCE)
OSHA PEL:NOT LISTED
ACGIH TLV:NOT LISTED

Ingred Name:ZIRCON (ZIRCONIUM IV,SILICATE)
CAS:14940-68-2
RTECS #:ZH9000000
Other REC Limits:5 MG/M*3
OSHA PEL:5 MG/M3/10 STEL (ZR)
ACGIH TLV:5 MG/M3/10 STEL (ZR)

Ingred Name:MOLYBDENUM
CAS:7439-98-7
RTECS #:QA4680000
Other REC Limits:5MG/M*3
OSHA PEL:15 MG/M3 TDUST
ACGIH TLV:10 MG/M3; 9293

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

LD50 LC50 Mixture:TLV FOR WELDING FUMES IS 5
MG/M3

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 BE DANGEROUS TO
HEALTH. SHORT TERM EXPOSURE MAY CAUSE DIZZINESS, NAUSEA, DRYNESS OR
IRRITATION OF NOSE, THROAT OR EYES. LONG TERM EXPOSURE MAY LEAD TO
SIDEROSIS. ARC RAYS CAN INJUR E EYES AND BURN SKIN. ELECTRIC SHOCK
CAN KILL.

Explanation of Carcinogenicity:CONTAINS NICKEL WHICH IS LISTED BY NTP
AND IARC AS

A POSSIBLE CARCINOGEN.

Effects of Overexposure:DIZZINESS, NAUSEA, DRYNESS/IRRITATION OF NOSE,
THROAT OR EYES, EYE INJURY, SKIN BURNS.

Medical Cond Aggravated by Exposure:AGGRAVAATION OF PREEXISTING
RESPIRATORY OR ALLERGIC CONDITIONS MAY OCCUR IN SOME WORKERS.

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

First Aid:INHALATION: REMOVE TO FRESH AIR. RESUSCITATE IF NOT
BREATHING. GET MEDICAL ATTENTION. EYES: IMMEDIATELY FLUSH WITH
WATER FOR 15 MINUTES. GET M

EDICAL ATTENTION. SKIN: REMOVE
CONTAMINATED CLOTHING. FLUSH WITH WATER. IF IRRITATION PERSISTS,
GET MEDICAL ADVICE. INGESTION: GIVE NOTHING BY MOUTH IF
UNCONSCIOUS. GET MEDICAL ATTENTION.

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

Flash Point:NONFLAMMABLE
Lower Limits:NOT GIVEN
Upper Limits:NOT GIVEN
Extinguishing Media:NONFLAMMABLE. USE MEDIA APPROPRIATE FOR SURROUNDING
FIRE.
Fire Fighting Procedures:NONFLAMMABLE AS SHIPPED. DURING USE, WELDING
A
RCS AND SPARKS CAN IGNITE COMBUSTIBLES.
Unusual Fire/Explosion Hazard:DECOMPOSITION FUMES MAY BE TOXIC.

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

Spill Release Procedures:PRODUCT IS NONHAZARDOUS AS SHIPPED/STORED. NO
SPECIFIC CLEANUP PROCEDURES REQUIRED.
Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:PRODUCT IS NONHAZARDOUS AS
SHIPPED/STORED.
Other Precau
tions:NONE SPECIFIED BY MANUFACTURER.

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

Respiratory Protection:USE RESPIRABLE FUME RESPIRATOR OR AIR SUPPLIED
RESPIRATOR WHEN WELDING 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 IN BREATHING ZONE.
Protective Gloves:WELDER'S GLOVES
Eye Protection:HELMET OR FACE
SHIELD WITH FILTER LENS
Other Protective Equipment:HEAD, HAND AND BODY PROTECTION WHICH HELP TO
PREVENT INJURY FROM RADIATION, SPARKS AND ELECTRICAL SHOCK.
Work Hygienic Practices:WASH WITH SOAP AND WATER AFTER HANDLING PRODUCT
AND BEFORE EATING DRINKING OR SMOKING.
Supplemental Safety and Health
WELDING FUMES CANNOT BE CLASSIFIED SIMPLY. THEIR COMPOSITION AND
QUANTITY ARE DEPENDENT UPON THE METAL BEING WELDED, THE PROCESS,
PROCEDURES AND ELECTRODES USED. WHEN THE ELECTRODE IS CO

NSUMED, THE

FU ME AND GAS DECOMPOSITION PRODUCTS ARE DIFFERENT IN PERCENT AND FORM FROM THE INGREDIENTS.

===== 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:NONE

Solubility in Water:NIL

Appearance and Odor:NONE SPECIFIED BY MANUFACTURER.

Percent Volatiles by Volume:NIL

===== Stabil

ity and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES

NONE SPECIFIED BY MANUFACTURER.

Stability Condition to Avoid:NONE SPECIFIED BY MANUFACTURER.

Hazardous Decomposition Products:LIKELY TO FORM FLUORIDES, COMPLEX

OXIDES OF IRON, MANGANESE, SILICON, NICKEL, CARBON MONOXIDE, CARBON DIOXIDE, OZONE

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

Waste Disposal Methods:PREVENT WASTE FROM CONTAMINATING SURROUNDING ENVIRONMENT. DISCARD

ANY PRODUCT, RESIDUE, DISPOSAL CONTAINER OR

LINER IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS.

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