

ALLOY RODS CORPORATION -- 8N12 MISCELLANEOUS ARCALOY HIGH ALLOY COVERED
ELECTRODES -- 3439-00-238-5667

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

Product ID:8N12 MISCELLANEOUS ARCALOY HIGH ALLOY COVERED ELECTRODES

MSDS Date:02/15/1988

FSC:3439

NIIN:00-238-5667

MSDS Number: BZPFS

=== Responsible Party ===

Company Name:ALLOY RODS CORPORATION

Address:WILSON AVENUE

Box:517

City:HANOVER

State:PA

ZIP:17331

Coun

try: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:TITANIUM

CAS:7440-32-6

RTECS #:XR1700000

Other REC Limits:NONE RECOMMENDED

Ingred Name:NIOBIUM (ALSO CALLED COLUMBIUM)

CAS:7440-03-1

Other REC Limits:NO

NE RECOMMENDED

Ingred Name:FELDSPAR; (POTASSIUM FELDSPAR)

CAS:68476-25-5

Other REC Limits:NONE RECOMMENDED

Ingred Name:SODIUM METASILICATE

CAS:6834-92-0

RTECS #:VV9275000

Other REC Limits:NONE RECOMMENDED

Ingred Name:POTASSIUM TITANATE

CAS:12030-97-6

Other REC Limits:NONE RECOMMENDED

Ingred Name:IRON

CAS:7439-89-6

RTECS #:NO4565500

Other REC Limits:NONE RECOMMENDED

Ingred Name:CALCIUM CARBONATE (MARBLE) (LIMESTONE)

CAS:1317-65-3

RTECS #:EV9580000

Other REC Limits:NONE RECOMMENDED

OSHA PEL:1

5 MG/M3 TDUST

ACGIH TLV:10 MG/M3 TDUST; 9596

Ingred Name:CRYOLITE (SODIUM ALUMINUM FLUORIDE)

CAS:15096-52-3

RTECS #:WA9625000

Other REC Limits:NONE RECOMMENDED

Ingred Name:TITANIUM DIOXIDE

CAS:13463-67-7

RTECS #:XR2275000

Other REC Limits:NONE RECOMMENDED

OSHA PEL:15 MG/M3 TDUST

ACGIH TLV:10 MG/M3 TDUST; 9596

Ingred Name:SODIUM TITANATE

CAS:12034-34-3

Other REC Limits:NONE RECOMMENDED

==== Hazards Identification =====

LD50 LC50 Mixture:WELDING FUME 5MG/M3

(ACGIH).

Routes of Entry: Inhalation: YES Skin: NO Ingestion: NO

Reports of Carcinogenicity: NTP: YES IARC: YES OSHA: YES

Health Hazards Acute and Chronic: FUMES/GASES CAN BE DANGEROUS TO HEALTH. ARC RAYS CAN INJURE EYES/BURN SKIN. ELECTRIC SHOCK CAN KILL. ACUTE OVEREXPO TO WELDING

FUMES: DISCOMFORT, DIZZ, NAU, DRYNESS, IRRIT OF NOSE/THROAT/EYES. CHRONIC OVEREXPO MAY LEAD TO SIDEROSIS (IRON DEPOSITS IN LUNG), BELIEVED BY SOME INVESTIGATORS TO AFFECT PULM FUNCTION.

Explanation of Carcinogenicity:

PER MSDS: CARCINOGENICITY: NTP-NI, CR.

IARC-NI, CR. OSHA-CR. (IF INGREDIENTS CONTAIN THESE MATERIALS).

Effects of Overexposure: INJURY TO EYES, BURN TO SKIN. DEATH FROM

ELECTRIC SHOCK. DISCOMFORT, DIZZINESS, NAUSEA, DRYNESS, IRRITATION OF NOSE/THROAT/EYES. SIDEROSIS.

Medical Conditions Aggravated by Exposure: AGGRAVATION OF PRE-EXISTING

RESPIRATORY OR ALLERGIC CONDITIONS MAY OCCUR IN SOME WORKERS.

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

First Aid: CALL FOR MEDICAL AID.

EMPLOY FIRST AID TECHNIQUES RECOMMENDED BY THE AMERICAN RED CROSS.

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

Flash Point: NP

Autoignition Temp: Autoignition Temp Text: NP

Lower Limits: NP

Upper Limits: NP

Extinguishing Media: NON-FLAMMABLE.

Fire Fighting Procedures: NONE SPECIFIED BY MANUFACTURER.

Unusual Fire/Explosion Hazard: WELDING ARC & SPARKS CAN IGNITE COMBUSTIBLES. SEE Z-49.1

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

Handling and Storage Precautions:

MONITOR FUMES OF CR VI/NI/CU WHEN PRESENT IN INGREDIENTS. READ/UNDERSTAND MFG INSTRUCTIONS/PRECAUTION LABEL ON PRODUCT. REF: Z-49.1/OSHA 29CFR1910.

Other Precautions: ONE RECOMMENDED WAY TO DETERMINE COMP/QUANT OF FUMES/GASES WORKERS EXPOSED: TAKE AIR SAMPLE INSIDE WELDER'S HELMET/BREATH ZONE. SEE ANSI/AWS F1.1 FROM AMERICAN WELDING SOCIETY, PO BOX 351040, MIAMI, FL 33135. TRAIN WELDER NOT TO TOUCH LIVE ELECTRICAL PARTS/INSULATE FROM WORK/GROUND

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

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Respiratory Protection:USE RESPIRABLE FUME RESPIRATOR OR AIR SUPPLIED RESPIRATOR WHEN WELDING IN CONFINED SPACE OR WHERE LOCAL EXHASUT OR VNETILATION DOES NOT KEEP EXPOSURE BELOW TLV.

Ventilation:USE ENOUGH VENT/LOC EXHA @ARC/BOTH TO KEEP FUME/GAS BEL TLV IN WORKER BREATH ZONE/GEN AREA.TRAIN WELD KEEP HEAD OUT FUME

Protective Gloves:WELDERS GLOVES

Eye Protection:FCSHIELD W/FILT LEN,FLASH/SCREEN GOGG.

Other Protective Equipment:WEAR HELMET/HEAD/HAND/BODY PROT FRM RAD

IATION/SPARKS/ELECT SHOCK.ARM/SHOULDER PROT,APRONS,HATS,DARK SUBSTANTIAL CLOTH.

Work Hygienic Practices:NONE SPECIFIED BY MANUFACTURER.

Supplemental Safety and Health

DECOMPO:USED,COAT ON METAL,#OF WELDERS/VOL IN WORKAREA,QUAL/AMT OF VENTI,POSITION FO WLEDER HEAD W/RESPECT TO FUME PLUME,PRESENCE OF CONTAMIN IN ATM.ELECTRODE CONSUMED FUNE/GAS DECOMPO PROD DIFFERENT IN %/FORM FROM INGREDIENTS.REASONABLY EXPECT:FLUORIDES,COMPLEX OXIDES OF METALS IN PRODUCT,CO/CO2,OZONE,NITROGEN OXIDE

S.

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

HCC:N1

Boiling Pt:B.P. Text:NP

Melt/Freeze Pt:M.P/F.P Text:NP

Decomp Temp:Decomp Text:NP

Vapor Pres:NP

Vapor Density:NP

Spec Gravity:NP

pH:NP

Viscosity:NP

Evaporation Rate & Reference:NP

Solubility in Water:NP

Appearance and Odor:NP

Percent Volatiles by Volume:NP

Corrosion Rate:NP

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

NONE SPECIFIED BY MANUFACTURER.

Stability Condition to Avoid:NONE SPEC

IFIED BY MANUFACTURER.

Hazardous Decomposition Products:WELDING FUMES CAN'T BE CLASSIFIED
SIMPLY.COPO/QUANT DEPENDENT UPON METAL BEING
WELDED/PROCESS/PROCEDURES/ELECTRODES(SUP)

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

Waste Disposal Methods:PREVENT WASTE FROM CONTAMINATING SURROUNDING
ENVIRO.DISCARD ANY PRODUCT RESIDUE/DISPOSABLE CNTNR/LINER IN ENVIRO
ACCEPTABLE MANNER IN FULL COMPLIANCE W/FED/STATE/LOC REGULATIONS.

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