

TECHALLOY MARYLAND INC. REID-AVERY DIV. -- AWS 316 WELDING ELECTRODE --
3439-01-039-4382

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

Product ID:AWS 316 WELDING ELECTRODE

MSDS Date:11/01/1985

FSC:3439

NIIN:01-039-4382

MSDS Number: BGSLH

=== Responsible Party ===

Company Name:TECHALLOY MARYLAND INC. REID-AVERY DIV.

Address:2310 CHESAPEAKE AVE

City:BALTIMORE

State:MD

ZIP:21222-4012

Emergency Phone Num:301-63

3-9300

CAGE:59711

=== Contractor Identification ===

Company Name:TECHALLOY COMPANY, INC.

Address:2310 CHESAPEAKE AVENUE

Box:City:BALTIMORE

State:MD

ZIP:21222

Country:US

Phone:410-633-9300; 800-638-1458

CAGE:59711

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

Ingred Name:IRON

CAS:7439-89-6

RTECS #:NO4565500

Ingred Name:CHROMIUM (SARA III)

CAS:7440-47-3

RTECS #:GB4200000

Fraction by Wt: 17-20%

OSHA PEL:1 MG/M3

ACGIH TLV:0.5 MG/M3; 9192

EPA Rpt Qty:1 LB

DOT Rpt Qty:1 LB

Ingred Name:NICKEL (SARA III)
CAS:7440-02-0
RTECS #:QR5950000
Fraction by Wt: 11-14%
OSHA PEL:1 MG/M3
ACGIH TLV:1 MG/M3; 9192

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:SILICON
CAS:7440-21-3
RTECS #:VW0400000
OSHA PEL:15 MG/M3 TDUST
ACGIH TLV:10 MG/M3 TDUST; 9293

Ingred Name:MOLYBDENUM
CAS:7439-98-7
RTECS #:QA4680000
Fraction by Wt: 2-2.5%
OSHA PEL:15 MG/M3 TDUST
ACGIH TLV:10 MG/M3; 9293

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

Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO
Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:NO
Health Hazards Acute and Chronic:ACUTE:MAY RESULT IN DISCOMFORT SUCH AS
DIZZINESS,NAUSEA,DRYNESS OR IRRITATION OF NOSE,THROAT OR
EYES.TIGHTNESS IN CHEST,FEVER & ALLERGIC REACTIONS. CHRONIC:MAY
LEAD TO SIDEROSIS & IS BELIEVED BY SOME INVESTIGATORS TO AFFECT
PULMONARY FUNCTION.
Explanation of Carcinogenicity:NICKEL &
CHROMIUM ARE LISTED AS
CARCINOGENIC.
Medical Cond Aggravated by Exposure:NONE STATED

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

First Aid:REMOVE TO FRESH AIR.IF BREATHING IS DIFFICULT,ADMINISTER
OXYGEN,IF BREATHING GAS STOPPED,APPLY ARTIFICIAL RESPIRATOR, GET
MEDICAL HELP.

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

Extinguishing Media:USE PROPER MEDIA FOR SURROUNDING FIRE.
Fire Fighting Procedures:NEED TO WEAR PROTECTIVE EQUIPM

ENT.
Unusual Fire/Explosion Hazard:WELDING ARC & SPARKS CAN IGNITE
COMBUSTIBLES.

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

Spill Release Procedures:SWEEP UP OR SCOOP UP.

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

Handling and Storage Precautions:USE EXHAUST SYSTEM TO CLEAR WELDING
FUMES.

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

Respiratory Protection:USE RESPIRABLE FUME RESPIRATORY OR AIR SUPPLIED
RES
PIRATOR WHEN WELDING IN A CONFINED SPACE OR WHERE LOCAL EXHAUST
OR VENTILATION DOES NOT KEEP EXPOSURE BELOW TLV.

Ventilation:USE ADEQUATE GENERAL VENTILATION & LOCAL EXHAUST AT THE
ARC.

Protective Gloves:WELDER'S GLOVES.

Eye Protection:HELMET/FACE SHIELD WITH FILTER LENS.

Other Protective Equipment:WEAR PROTECTIVE CLOTHING.

Supplemental Safety and Health

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

HCC:N1

Solubility in Water:INSOLUBLE

Appearance and Odor:SOLID W
IRE OR ROD.

Percent Volatiles by Volume:0

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

Stability Indicator/Materials to Avoid:YES
NONE

Stability Condition to Avoid:NONE STATED.

Hazardous Decomposition Products:IT IS COMPLEX & CAN NOT BE CLASSIFIED
GASILY,DEPENDING ON THE ELECTRODE USED,COATING & CONTAMINANTS IN
THE ATMOSPHERE.

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

Waste Disposal Methods:DISCARD ANY PRODUCT RESIDUE,DISPOSABLE CONTAI

NER

OR LINER IN AN ENVIROMENTALLY ACCEPTABLE MANNER.

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