

ALL-STATE WELDING PRODUCTS INC. -- 5356,BARE ALUMINUM WELDING WIRE --
3439-01-012-3285

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

Product ID:5356,BARE ALUMINUM WELDING WIRE

MSDS Date:04/16/1991

FSC:3439

NIIN:01-012-3285

MSDS Number: BMDTN

=== Responsible Party ===

Company Name:ALL-STATE WELDING PRODUCTS INC.

Address:5112 ALLENDALE LN

Box:600

City:TANEYTOWN

State:MD

ZIP:21787

Country:US

Info Phone Num:800

-638-1647/717-637-8911

Emergency Phone Num:800-638-1647/717-637-8911

CAGE:69482

=== Contractor Identification ===

Company Name:ALL-STATE PRODUCTS/ DIV OF ESAB GROUP,INC

Address:5112 ALLENDALE ST

Box:600

City:TANEYTOWN

State:MD

ZIP:21787

Country:US

Phone:1-410-756-4330

CAGE:69482

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

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 Na

me:IRON
CAS:7439-89-6
RTECS #:NO4565500
Other REC Limits:NONE SPECIFIED
OSHA PEL:10 MG/M3 (MFR)
ACGIH TLV:5 MG/M3 (MFR)

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:MANGANESE (SARA III)
CAS:7439-96-5
RTECS #:OO9275000
Other REC Limits:NONE SPECIFIED
OSHA PEL:(C) 5 MG/M3 DUST
ACGIH TLV:5 MG/M3 DUST 9293

Ingred Name:ZINC OXIDE
CAS:1
314-13-2
RTECS #:ZH4810000
Other REC Limits:NONE SPECIFIED
OSHA PEL:15MG/M3 TDUST/5 FUME
ACGIH TLV:10MG/M3 TDUST; 9293

Ingred Name:MAGNESIUM
CAS:7439-95-4
RTECS #:OM2100000
Other REC Limits:NONE SPECIFIED

Ingred Name:CHROMIUM (SARA III)
CAS:7440-47-3
RTECS #:GB4200000
Other 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:TITANIUM, METAL
CAS:7440-32-6
RTECS #:XR1700000
Other REC Limits:NONE SPECIFIED
OSHA PEL:10 MG/M3 (MFR)
AC

GIH TLV:10 MG/M3 (MFR)

Ingred Name:ALUMINUM (SARA III)
CAS:7429-90-5
RTECS #:BD0330000
Other REC Limits:NONE SPECIFIED
OSHA PEL:15MG/M3 DUST/5 FUME
ACGIH TLV:10MG/M3 DUST; 9192

Ingred Name:COBALT (SARA III)
CAS:7440-48-4
RTECS #:GF8750000
Other REC Limits:NONE SPECIFIED
OSHA PEL:0.1 MG/M3;AS CO
ACGIH TLV:0.05 MG/M3;DUST 9293

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

Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO
Reports of Carcinogenicity:NTP:YES IARC
:YES OSHA:NO

Health Hazards Acute and Chronic:ACUTE-FUMES CAN CAUSE
IRRITATION,DIZZINESS,WATERY EYES,HEADACHE,NAUSEA,BREATHING
DIFFICULTY,COUGHING,CHEST PAINS.COPPER FUMES MAY CAUSE METAL FUME
FEVER WHICH MAY INCLUDE FEVER,BODY ACHE,CHILLS.ARC RA YS CAN INJURE
EYES & BURN SKIN.ELECTRICSHOCK CAN KILL.IR RADIATION CAN INJURE
EYES.CHRONIC-SIDEROSIS/LUNG DISEASES.

Explanation of Carcinogenicity:CONTAINS CHROMIUM.

Effects of Overexposure:FUMES CAN CAUSE IRRITATION, DIZZINESS, WA
TERY

EYES, HEADACHE, NAUSEA, BREATHING DIFFICULTY, COUGHING, CHEST
PAINS. COPPER FUMES MAY CAUSE METAL FUME FEVER WHICH MAY INCLUDE
FEVER, BODY ACHE, CHILLS. A RC RAYS CAN INJURE EYES & BURN SKIN.
ELECTRIC SHOCK CAN KILL. IR RADIATION CAN INJURE EYES.

Medical Cond Aggravated by Exposure:PERSONS WITH IMPAIRED PULMONARY
FUNCTION, AIRWAY DISEASES AND CONDITIONS SUCH AS ASTHMA, EMPHYSEMA,
CHRONIC BRONCHITIS, ETC... CAN BE AGGRAVATED BY THE EXPOSURE.

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

First Aid:GET MEDICAL ATTENTION IN ALL CASES.INHALED:REMOVE TO FRESH
AIR.PROVIDE CPR/OXYGEN IF NECESSARY.EYES:FLUSH WITH WATER FOR 15
MINUTES HOLDING EYELIDS OPEN.SKIN:WASH WITH SOAP & WATER.ORAL:GET
MEDICAL HE LP.

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

Flash Point:NONFLAMMABLE
Extinguishing Media:CLASS "D" DRY CHEMICAL. DO NOT USE WATER. WATER MAY
REACT WITH BURNING ALUMINUM VIOLENTLY.
Fire Fighting Pro

cedures:WEAR FULL PROTECTIVE CLOTHING AND
NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS WITH FULL
FACEPIECE OPERATED IN THE POSITIVE PRESSURE MODE.
Unusual Fire/Explosion Hazard:MOLTEN METAL ALLOYS MAY EXPLODE ON
CONTACT WITH WATER. RUST AND CERTAIN METAL OXIDES (OXIDES OF
COPPER,IRON) MAY ALSO REACT VIOLENTLY WITH WATER.

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

Spill Release Procedures:IN SOLID FORM THIS MATERIAL POSES NO SPECIAL
CLEAN-UP PRO
BLEMS.
Neutralizing Agent:NOT APPLICABLE.

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

Handling and Storage Precautions:STORAGE-STORE IN A COOL,DRY,WELL
VENTILATED AREA AWAY FROM MOISTURE,ACIDS & FLAMES.
Other Precautions:AVOID BREATHING OF FUMES. USE WITH ADEQUATE
VENTILATION. WASH THOROUGHLY AFTER HANDLING AND BEFORE EATING AND
DRINKING.

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

Respiratory Protection:USE NIOSH/MSHA APPROVED SUPP
LIED AIR RESPIRATORY
PROTECTION OR RESPIRABLE FUME RESPIRATOR WHEN WELDING, BRAZING OR
SOLDERING IN CONFINED SPACE OR WHERE LOCAL EXHAUST OR VENTILATION
DOES NOT KEEP EXPOS URE BELOW TLV.
Ventilation:LOCAL EXHAUST VENTILATION SHOULD BE USED TO CONTROL
EXPOSURE TO AIRBORNE FUMES WHENEVER POSSIBLE.
Protective Gloves:FLAME-PROOF WELDING GLOVES
Eye Protection:SAFETY GLASSES UNDER WELDING HELMET
Other Protective Equipment:EYE WASH STATION AND SAFETY SHOWER, WORK
CLOTHING AND APRON
AS REQUIRED.
Work Hygienic Practices:OBSERVE GOOD PERSONAL HYGIENE PRACTICES AND
RECOMMENDED PROCEDURES. DO NOT WEAR CONTAMINATED CLOTHING.
Supplemental Safety and Health
FORMULA CHANGED. FOR PREVIOUS FORMULATION, SEE P/N A UNDER THE SAME
NSN.

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

HCC:N1
Solubility in Water:INSOLUBLE
Appearance and Odor:SOLID WIRE - ODORLESS

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

Stability Indicator/Materi

als to Avoid: YES

STRONG ACIDS

Stability Condition to Avoid: FLAMES

Hazardous Decomposition Products: CARBON MONOXIDE, CARBON DIOXIDE, OZONE AND NITROGEN OXIDES MAY BE FORMED BY THE RADIATION FROM THE ARC DURING WELDING.

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

Waste Disposal Methods: PRIOR TO DISPOSAL, CONSIDER IF MATERIAL HAS RECOVERY VALUE. DISPOSE OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS. PREVENT WASTE FROM CONTAMINATING ENVIRONMENT.

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.