

NATIONAL WELDING ALLOYS, INC. -- 5356 ALUMINUM -- 3439-01-012-6661  
===== Product Identification =====

Product ID:5356 ALUMINUM  
MSDS Date:11/10/1986  
FSC:3439  
NIIN:01-012-6661  
MSDS Number: BGWFM  
=== Responsible Party ===  
Company Name:NATIONAL WELDING ALLOYS, INC.  
Address:1600 SOUTH CANAL STREET  
City:PITTSBURGH  
State:PA  
ZIP:15215  
Country:US  
Info Phone Num:412-781-4255  
Emergency Phone Num:412-781-4255

CAGE:0ACE2  
=== Contractor Identification ===  
Company Name:NATIONAL WELDING ALLOYS INC  
Address:1600 SOUTH CANAL STREET  
Box:City:PITTSBURGH  
State:PA  
ZIP:15215-2624  
Country:US  
Phone:412-781-4255  
CAGE:0ACE2

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

Ingred Name:ALUMINUM (SARA III)  
CAS:7429-90-5  
RTECS #:BD0330000  
Fraction by Wt: 93-94%  
Other REC Limits:NONE  
OSHA PEL:15MG/M3 DUST/5 FUME  
ACGIH TLV:10MG/M3 DUST; 9192

Ingred Name:MAGNESIUM  
CAS:7439-95-4  
RTECS #:OM2100000  
Ot

her REC Limits:NONE

Ingred Name:IRON  
CAS:7439-89-6  
RTECS #:NO4565500  
Fraction by Wt: 0.4%  
Other REC Limits:NONE  
OSHA PEL:10MG/M<sup>3</sup>(FE\*2O\*3)  
ACGIH TLV:15MG/M<sup>3</sup>(FE\*2O\*3)

Ingred Name:SILICON  
CAS:7440-21-3  
RTECS #:VW0400000  
Fraction by Wt: 0.25%  
Other REC Limits:NONE  
OSHA PEL:15 MG/M<sup>3</sup> TDUST  
ACGIH TLV:10 MG/M<sup>3</sup> TDUST; 9293

Ingred Name:TITANIUM  
CAS:7440-32-6  
RTECS #:XR1700000  
Fraction by Wt: .06-20%  
Other REC Limits:NONE  
OSHA PEL:10MG/M<sup>3</sup>(TIO\*2)  
ACGIH TLV:10MG/M<sup>3</sup>(TIO\*2)

Ingred Name:CHROMIUM (SARA III)  
CAS:7440-47-3  
RTECS #:GB4200000  
Fraction by Wt: .05-.20%  
Other REC Limits:NONE  
OSHA PEL:1 MG/M<sup>3</sup>  
ACGIH TLV:0.5 MG/M<sup>3</sup>; 9192  
EPA Rpt Qty:1 LB  
DOT Rpt Qty:1 LB

Ingred Name:MANGANESE (SARA III)  
CAS:7439-96-5  
RTECS #:OO9275000  
Other REC Limits:NONE  
OSHA PEL:(C) 5 MG/M<sup>3</sup> DUST  
ACGIH TLV:5 MG/M<sup>3</sup> DUST 9293

Ingred Name:COPPER (SARA III)  
CAS:7440-50-8  
RTECS #:GL5325000  
Fraction by Wt: 0.1%  
Other REC Limits:NONE  
OSHA PEL:0.1MG/M<sup>3</sup> FUME/1 DUST  
ACGIH TLV:0.2MG/M<sup>3</sup> FUME; 9192  
EPA Rpt Qty:5000 LBS  
DOT Rpt

Qty:5000 LBS

Ingred Name:ZINC (SARA III)

CAS:7440-66-6

RTECS #:ZG8600000

Fraction by Wt: 0.1%

Other REC Limits:NONE

OSHA PEL:10 MG ZNO/M3

ACGIH TLV:10 MG ZNO/M3; 9192

EPA Rpt Qty:1000 LBS

DOT Rpt Qty:1000 LBS

Ingred Name:OTHER TOTAL

Fraction by Wt: 0.15%

Other REC Limits:NONE

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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:ACUT

E:METALLIC TASTE,NAUSEA,TIGHTNESS

OF CHEST,FEVER,DIZZINESS,DRYNESS,IRRITATION OF EYES,NOSE,THROAT.

CHRONIC:EXCESSIVE LEVELS MAY CAUSE BRONCHIAL ASTHMA,LUNG

FIBROSIS,PNEUMOCONIOSIS.

Explanation of Carcinogenicity:CHROMIUM IS LISTED UNDER NTP AND IARC.

Effects of Overexposure:METALLIC TASTE, NAUSEA, TIGHTNESS OF CHEST,

FEVER, DIZZINESS, DRYNESS, IRRITATION OF EYES, NOSE AND THROAT.

Medical Cond Aggravated by Exposure:AGGRAVATION OF EXISTING RESPIRATORY  
OR ALLERGIC CONDITIONS.HI

GHYER LEVEL OF LUNG RELATED PROBLEMS AMONG  
SMOKERS.

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

First Aid:REMOVE FROM EXPOSURE AND OBTAIN PROMPT MEDICAL ATTENTION. IF  
NOT BREATHING,GIVE CPR.IF UNCONSCIOUS,GIVE OXYGEN. EMPLOY FIRST AID  
TECHNIQUES RECOMMENDED BY AMERICAN RED CROSS.

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

Flash Point:NONE

Extinguishing Media:USE MEDIA APPROPRIATE FOR SURROUNDING FIRE.

Fire Fighting Procedures:FIRE

FIGHTERS SHOULD USE NIOSH APPROVED SCBA & FULL PROTECTIVE EQUIPMENT WHEN FIGHTING CHEMICAL FIRE. USE WATER SPRAY TO COOL NEARBY CONTAINERS EXPOSED TO FIRE.

Unusual Fire/Explosion Hazard:WELDING ARCS AND SPARKS CAN IGNITE COMBUTIBLE PRODUCTS.

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

Spill Release Procedures:CLEAN UP ANY GRINDING DUST OR WASTE RESIDUE AND PLACE IN APPROPRIATE DOT APPROVED DISPOSAL CONTAINER.

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

Other Precautions:TRAIN WELDER TO KEEP HIS OUT OF THE FUMES. MONITOR AIR TO ENSURE ACCEPTABLE EXPOSURES. AVOID ELECTRICAL SHOCK BY MAINTAINING DRY WORK AREA.

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

Respiratory Protection:FUME RESPIRATOR OR AIR SUPPLIED RESPIRATOR IN CONFINED SPACES OR WHERE VENTILATION DOES NOT KEEP EXPOSURE BELOW TLV.

Ventilation:LOCAL EXHAUST TO MAINTAIN BELOW TLV.

Protective Gloves:WELDER'S GLOVES.

Eye Pr

tection:HELMET OR FACE SHIELD WITH FILTER LENS.

Other Protective Equipment:SUBSTANTIAL DARK CLOTH,ARM PROTECTOR,APRON,HAT,SHOULDER PROTECTION.

Work Hygienic Practices:WASH HANDS THOROUGHLY BEFORE EATING,SMOKE,USING SANITARY FACILITIES.

Supplemental Safety and Health  
NONE.

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

HCC:N1

Solubility in Water:INSOLUBLE

Appearance and Odor:WELDING ROD.NO ODOR.

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

Stability Indicator/Materials to Avoid: YES

Hazardous Decomposition Products: FUMES OF METALS AND METALS  
OXIDES, CO, NO<sub>2</sub>, O<sub>3</sub>.

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

Waste Disposal Methods: DISPOSE OF FUMES, FLUX OR WELD GRINDING RESIDUE  
FROM THE WORK AREA OR FROM FILTERS IAW ALL APPLICABLE FEDERAL, STATE  
AND LOCAL REGULATIONS.

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