

NATIONAL WELDING ALLOYS, INC. -- ALUMINUM AND MAGNESIUM BARE WELDING WIRE 55 --
3439-01-013-3236

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

Product ID:ALUMINUM AND MAGNESIUM BARE WELDING WIRE 55

MSDS Date:08/01/1990

FSC:3439

NIIN:01-013-3236

MSDS Number: BLNGP

=== 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, CHEMTREC 800-424-9300

CAGE:0ACE2

=== Contractor Identification ===

Company Name:NATIONAL TORCH TIP CO INC.

Address:50 FREEPORT RD

City:PITTSBURGH

State:PA

ZIP:15215-2906

Country:US

Phone:412-781-4200

CAGE:93009

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 =====

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Ingred Name:SILICA, CRYSTALLINE - FUSED
CAS:60676-86-0
RTECS #:VV7328000
Fraction by Wt: 0.25%
Other REC Limits:0.08 MG/M3 R
OSHA PEL:SEE TABLE Z3
ACGIH TLV:0.1 MG/M3 RDUST;9293

Ingred Name:IRON OXIDE
CAS:1309-37-1
RTECS #:NO7400000
Fraction by Wt: 0.40%
Other REC Limits:NONE SPECIFIED
OSHA PEL:10 MG/M3 (FE)
ACGIH TLV:5 MG/M3(FE),B2; 9293

Ingred Name:COPPER (SARA III)
CAS:7440-50-8
RTECS #:GL5325000
Fraction by Wt: 0.10%
Other REC Limits:NONE SPECIFIED
OSHA PEL:0.1MG/M3 FUME/1 DUST
ACGIH T
LV: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
Fraction by Wt: 0.5-1.0%
Other REC Limits:1 MG/M3 FUMES
OSHA PEL:(C) 5 MG/M3 DUST
ACGIH TLV:5 MG/M3 DUST 9293

Ingred Name:CHROMIUM (SARA III)
CAS:7440-47-3
RTECS #:GB4200000
Fraction by Wt: .05-0.2%
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:MAGNESIUM OXIDE
CAS:1309-48-4
RTECS #:OM38500

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Fraction by Wt: 4.7-5.5%

Other REC Limits:NONE SPECIFIED

OSHA PEL:15 MG/M3 PARTICULATE

ACGIH TLV:10 MG/M3;TDUST; 9293

Ingred Name:ZINC OXIDE

CAS:1314-13-2

RTECS #:ZH4810000

Fraction by Wt: 0.25%

Other REC Limits:NONE SPECIFIED

OSHA PEL:15MG/M3 TDUST/5 FUME

ACGIH TLV:10MG/M3 TDUST; 9293

Ingred Name:TITANIUM DIOXIDE

CAS:13463-67-7

RTECS #:XR2275000

Fraction by Wt: .05-0.2%

Other REC Limits:NONE SPECIFIED

OSHA PEL:15 MG/M3 TDUST

ACGIH TLV:10 MG/M3 TDUST; 9293

Ingred Name:ALUMINUM (SARA III)

CAS:7429-90-5

RTECS #:BD0330000

Fraction by Wt: BALANCE

Other REC Limits:NONE SPECIFIED

OSHA PEL:15MG/M3 DUST/5 FUME

ACGIH TLV:10MG/M3 DUST; 9192

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===== 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:SHORT TERM EXPOSURE TO WELDING FUMES,
GASES OR DUST MAY RESULT IN DISCOMFORT SUCH AS DIZZINESS, NAUSEA,
FEVER, DRYNESS AND/OR IRR

ITATION OF NOSE, THROAT AND EYES. SKIN

SENSITIVITY MAY ALSO BE NOTED. LONG TERM EXPOSURE TO

FUMES/GASES/DUST MAY CAUSE PULMONARY IRRITATION OR PNEUMOCONIOSIS;

& SIDEROSIS FROM IRON FUMES.

Explanation of Carcinogenicity:ALUMINUM AND CHROMIUM ARE LISTED

CARCINOGENS BY IARC AND NTP.

Effects of Overexposure:EXPOSURE TO WELDING FUMES MAY RESULT IN

DISCOMFORT SUCH AS DIZZINESS, NAUSEA, FEVER, DRYNESS AND/OR

IRRITATION OF NOSE, THROAT AND EYES. SKIN SENSITIVITY MAY ALSO BE

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OTED. WATERY EYES, HEADACHE, BREATHING DIFFICULTY, FREQUENT
COUGHING AND/OR CHEST PAINS MAY OCCUR FROM ACUTE EXPOSURE. TOXIC
GASES CAN BE FATAL.

Medical Condition Aggravated by Exposure: INDIVIDUALS WITH IMPAIRED PULMONARY
FUNCTION OR ILLNESS MAY HAVE SYMPTOMS EXACERBATED BY IRRITANTS
CONTAINED IN WELDING FUMES.

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

First Aid: IN CASE OF ELECTRICAL SHOCK, TURN OFF POWER PRIOR TO REMOVAL
FROM EXPOSURE AREA AND ADMINISTRATION OF FIRST AID. REMOVE FROM
EXPOSURE AREA AND CALL FOR MEDICAL AID. ADMINISTER OXYGEN IF
BREATHING IS DIFFICULT. IF NOT BREATHING, BEGIN ARTIFICIAL
RESPIRATION. IF NO DETECTABLE PULSE, BEGIN EXTERNAL HEART MASSAGE.
EMPLOY FIRST AID TECHNIQUES RECOMMENDED BY THE AMERICAN RED CROSS.

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

Extinguishing Media: NONCOMBUSTIBLE. USE EXTINGUISHING MEDIA APPROPRIATE
TO THE SURROUNDING FIRE.

Fire Fighting Procedures:

TO EXTINGUISH A METAL POWDER FIRE USE DRY
SAND, OR CLASS D FIRE EXTINGUISHERS. USE WATER SPRAY TO COOL NEARBY
CONTAINERS EXPOSED TO FIRE.

Unusual Fire/Explosion Hazard: FIRE OR EXCESSIVE HEAT MAY CAUSE
PRODUCTION OF HAZARDOUS DECOMPOSITION PRODUCTS.

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

Spill Release Procedures: CLEAN UP ANY GRINDING DUST OR WASTE RESIDUES
AND PLACE IN SUITABLE DOT APPROVED CONTAINERS AND DISPOSE OF IN
FULL COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS. AVOID
INHALATION AND SKIN EXPOSURE.

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

Handling and Storage Precautions: WEAR GLOVES AND FLAME RETARDANT
CLOTHING WHEN CUTTING, GRINDING OR WELDING. DO NOT EXPOSE SKIN TO
RADIATION WHEN HOT CUTTING OR WELDING.

Other Precautions: PROVIDE PROTECTIVE SCREENS TO SHIELD OTHERS. WHEN
ELECTRODES AND FLUXES ARE CONSUMED, THE FUME AND GAS DECOMPOSITION
PRODUCTS GENERATED ARE DIFFERENT

IN FORM FROM THE INGREDIENTS LISTED. NEW COMPOUNDS NOT IN THE ELECTRODES MAY FORM.

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

Respiratory Protection:USE WELD FUME RESPIRATOR OR AIR SUPPLIED RESPIRATOR WHEN CUTTING, GRINDING OR WELDING IN A CONFINED SPACE OR WHERE LOCAL EXHAUST OR GENERAL VENTILATION DOES NOT KEEP EXPOSURE BELOW RECOMMENDED LIMITS. USE ONLY NIOSH APPROVED RESPIRATORS.

Ventilation:USE ENOUGH VENTILATION WHEN CUTTING, GRINDING OR WELDING TO

KEEP THE DUST, FUMES & GASES FROM THE WORKERS BREATHING ZONE

Protective Gloves:FLAMEPROOF GAUNTLER GLOVES

Eye Protection:OSHA APPROVED GOGGLES/FACE SHIELD W/LENS

Other Protective Equipment:FLAME RETARDANT CLOTHING WHEN CUTTING, GRINDING OR WELDING. DO NOT EXPOSE SKIN TO RADIATION WHEN HOT CUTTING OR WELDING.

Work Hygienic Practices:WASH THOROUGHLY BEFORE EATING OR SMOKING. LAUNDER CONTAMINATED CLOTHING BEFORE REUSE.

Supplemental Safety and Health

WELDING AND HOT CUTTING FUME

S & GASES CANNOT BE CLASSIFIED SIMPLY.

THEIR COMPOSITION AND QUANTITY ARE DEPENDENT ON THE METAL BEING WELDED, THE PROCEDURES, PROCESSES AND THE TYPE OF WIRE OR ELECTRODES USED. OTHER INFLUENCING FACTORS ARE THE PRESENCE OF CONTAMINANTS. CHLORINATED SOLVENTS MAY DECOMPOSE TO TOXIC GASES.

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

HCC:N1

Appearance and Odor:SOLID WIRE OR ROD, GREY TO SILVER IN COLOR

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

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Stability Indicator/Materials to Avoid:YES

MINERAL ACIDS AND STRONG OXIDIZING AGENTS

Stability Condition to Avoid:NONE

Hazardous Decomposition Products:WELDING/CUTTING OPERATIONS MAY INCLUDE ELEMENTAL METALS, OXIDES OF THE METALS, FUMES/GASES & ELECTROMAGNETIC RADIATION.

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

Waste Disposal Methods:DISPOSE I/A/W FEDERAL, STATE & LOCAL REGULATIONS. CHROMIUM IS REGULATED BY EPA.

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