

NATIONAL WELDING ALLOYS, INC. -- ALUMINIUM ALLOY BARE WIRE 4043 (AMS 4190) --  
3439-00-602-5974

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

Product ID:ALUMINIUM ALLOY BARE WIRE 4043 (AMS 4190)

MSDS Date:08/01/1990

FSC:3439

NIIN:00-602-5974

MSDS Number: BNBR5

=== 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 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 =====

Ingred Name:ALUMINUM (SA

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

Ingred Name:SILICA, CRYSTALLINE - FUSED  
CAS:60676-86-0  
RTECS #:VV7328000  
Fraction by Wt: 4.5-6%  
Other REC Limits:NONE SPECIFIED  
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: 0.8%  
Other REC Limits:NONE SPECIFIED  
OSHA PEL:10 MG/M3 (FE)  
ACGIH TLV:5 MG/M3(FE),B2; 9293

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

LD50 LC50 Mixture:UNCLASSIFIED WELDING FUMES=5MG/M3 PEL

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

Reports of Carcinogenicity:NTP:NO IARC:NO 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 IRRITATION OF NOSE, THROAT AND EYES. SKIN  
SENSITIVITY MAY ALSO BE NOTED. A CUTE EXPOSURE FROM SOME

TOXIC

GASES MAYCAUSE PULMONARY EDEMA, ASPHYXIATION AND EXCESSIVE EXPOSURE  
CAN BE FATAL.

Explanation of Carcinogenicity:THIS COMPOUND CONTAINS NO INGREDIENTS AT  
CONCENTRATIONS OF 0.1% OR GREATER THAT ARE CARCINOGENS OR SUSPECT  
CARCINOGENS.

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  
NOTED. WATERY EYES, HEADACHE, BREA THING D

DIFFICULTY, FREQUENT

COUGHING AND/OR CHEST PAINS MAY OCCUR FROM ACUTE EXPOSURE. TOXIC GASES CAN BE FATAL.

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

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===== 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 EX

POSURE 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.

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

Flash Point: NONE

Autoignition Temp: Autoignition Temp Text: NONE

Extinguishing Media: USE MEDIA APPROPRIATE FOR SURROUNDING FIRE.

Fire Fighting Procedures: IF WIRE IS R

EDUCED TO POWDER FORM, CAUTION

MUST BE USED TO PREVENT FIRE OR EXPLOSION. TO EXTINGUISH A METAL POWDER FIRE USE A CLASS D FIRE EXTINGUISHING POWDER.

Unusual Fire/Explosion Hazard: NO UNUSUAL FIRE OR EXPLOSION HAZARDS ARE ASSOCIATED WITH THIS MATERIAL.

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===== 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 FEDE

RAL, STATE AND LOCAL REGULATIONS. AVOID INHALATION AND SKIN EXPOSURE.

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===== 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 I

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

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===== 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:WELDERS LEATHER GLOVES

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

Other Protective Equipment:WEAR HEAD AND BODY PROTECTION WHICH HELP TO PREVENT INJURY FROM RADIATION, SPARKS, FLAME AND ELECTRICAL SHOCK.

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

Supplemental Safety and Health

WELDING AND HOT CUTTING FUMES & 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.

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

HCC:N1

Evaporation Rate & Reference:0

Solubility in Water:NEGLIGIBLE

Appearance and Odor:SOLID WIRE, SILVER IN COLOR. NO ODOR

Percent Volatiles

by Volume:0

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

Stability Indicator/Materials to Avoid:YES

STRONG OXIDIZING AGENTS OR STRONG MINERAL ACIDS.

Hazardous Decomposition Products:VARIOUS ELEMENTAL METALS AND METAL

OXIDES MAY BE GENERATED FROM MELTING OR DROSS HANDLING OPERATIONS.

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

Waste Disposal Methods:PREVENT WASTE FROM CONTAMINATING SURROUNDING ENVIRONMENT. DISCARD ANY PRODUCT, RESIDUE

, DISPOSABLE CONTAINER OR  
LINER IN AN ENVIRONMENTALLY ACCEPTABLE MANNER, IN FULL COMPLIANCE  
WITH LOCAL, STATE AND FEDERAL REGULATIONS.

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