

NATIONAL WELDING ALLOYS, INC. -- BARE WIRE 347-15 OR 347-16 -- 3439-00-178-8575
===== Product Identification =====

Product ID:BARE WIRE 347-15 OR 347-16
MSDS Date:08/01/1990
FSC:3439
NIIN:00-178-8575
MSDS Number: BDFVZ
=== 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
Emerg
ency 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 =====

Ingred Name:SILICA, CRYSTALLINE

- FUSED
CAS:60676-86-0
RTECS #:VV7328000
Fraction by Wt: 0.90%
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: BALANCE
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: 0.75%
Other REC Limits:NONE SPECIFIED
OSHA PEL:0.1MG/M3 FUME/1 DUST
ACGIH TLV:0.2MG/M3 FUME; 9192
EPA Rpt Qt
y:5000 LBS
DOT Rpt Qty:5000 LBS

Ingred Name:MANGANESE (SARA III)
CAS:7439-96-5
RTECS #:OO9275000
Fraction by Wt: 0.5-2.5%
Other REC Limits:1 MG/M3 FUMES
OSHA PEL:(C) 5 MG/M3 DUST
ACGIH TLV:5 MG/M3 DUST 9293

Ingred Name:CARBON BLACK
CAS:1333-86-4
RTECS #:FF5800000
Fraction by Wt: 0.08%
Other REC Limits:NONE SPECIFIED
OSHA PEL:3.5 MG/M3
ACGIH TLV:3.5 MG/M3; 9192

===== 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:WELDING GENERATES FUMES, GASES AND ELECTROMATIC RADIATION WITH KNOWN ADVERSE HEALTH EFFECTS. THE COMPOSITION OF WELDING EMISSIONS VARIES SUBSTANTIALLY WITH THE WELDING PROCESS.

Explanation of Carcinogenicity:CHROMIUM AND NICKEL AND THEIR COMPOUNDS ARE LISTED AS CARCINOGENS BY NTP & IARC. SEE INDIVIDUAL REPORTS FOR DETAILS.

Effects of Overexposure:EXPOSURE TO WELDING FUMES MAY RESULT IN DISCO

MFORT 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 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
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First Aid:REMOVE FROM DUST OR FUME EXPOSURE. IF BREATHING HAS STOPPED PERFORM ARTIFICIAL RESPIRATION. SUMMON MEDICAL IMMEDIATELY.

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

Flash Point:NONE

Lower Limits:NONE

Upper Limits:NONE

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

Fire Fighting Procedures:IF THIS MAATERIAL IS EDUCED TO POWDER FORM, CAUTION MUST BE USED TO REVENT FIRE OR E

XPLOSION. TO EXTINGUISH A

METAL POWDER FIRE USE DRY SAND OR OTHER CLASS D.

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:SUPPLIER DID NOT ADDRESS THIS FIELD.

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

Handling and Storage Precautions:READ AND UNDERSTAND THE MANUFACTURER'S INSTRUCTIONS AND THE PRECAUTIONARY LA

BEL ON THE PRODUCT. SEE ANSI
STANDARD Z49.1 AND 29CFR1910 FOR MORE INFO.

Other Precautions:USE EXHAUST SYSTEM TO CLEAR WELDING FUMES. MAKE SURE
THAT INHALED AIR DOES NOT CONTAIN FUME CONSTITUENTS ABOVE
PERMISSABLE LEVELS.

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

Respiratory Protection:USE RESPIRABLE FUME RESPIRATOR OR AIR SUPPLIED
RESPIRATOR WHEN WELDING, BRAZING OR SOLDERING IN CONFINED SPACE OR
WHERE LOCAL EXHAUST OR VENTILATION DOES NOT KEEP EX
POSURE BELOW
PEL, TLV, OR STEL.

Ventilation:USE ENOUGH VENTILATION OR LOCAL EXHAUST TO KEEPS FUMES AND
GASES FROM THE WORKERS BREATHING ZONE AND GENERAL AREA.

Protective Gloves:FLAMEPROOF GAUNTLET GLOVES

Eye Protection:HELMET OR FACE SHIELD WITH ANSI FILTERS

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

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

LOTHING BEFORE REUSE.

Supplemental Safety and Health

TRAIN EMPLOYEE NOT TO TOUCH LIVE ELECTRICAL PARTS AND TO INSULATE
HIMSELF FROM WORK AND GROUND. WELDERS SHOULD NOT WEAR SHORT
SLEEVES, SHORT PANTS, OR CUTOFFS. TRAIN EMPLOYEE TO KEEP HIS HEAD
OUT OF THE FUMES.

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

HCC:N1

Appearance and Odor:SOLID ROD, COATED WITH FLUX.

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

Stability Indicator/Materi

als to Avoid:YES

AVOID CONTACT WITH ACIDS AND STRONG OXIDIZING AGENTS, WHICH MAY
GENERATE EXPLOSIVE HYDROGEN GAS.

Stability Condition to Avoid:NONE

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

Conditions to Avoid Polymerization:WILL NOT OCCUR.

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

Waste Disposal Methods:PREVENT WASTE FROM CONTAMINATING SURROUNDING

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ENVIRONMENT. DISCARD BANY PRODUCT, RESIDUE, DISPOSABLE CONTAINER OR LINER IN AN ENVIRONMENTALLY ACCEPTABLE MANNER IN FULL COMPLIANCE WITH FEDERAL, STATE, A ND LOCAL REGULATIONS.

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