

NATIONAL WELDING ALLOYS,INC.DIV. OF NAT.TORCH TIP -- BARE WIRE ER 80 S-D 2 --
3439-01-284-5611

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

Product ID:BARE WIRE ER 80 S-D 2

MSDS Date:08/01/1990

FSC:3439

NIIN:01-284-5611

MSDS Number: BLZJC

=== Responsible Party ===

Company Name:NATIONAL WELDING ALLOYS,INC.DIV. OF NAT.TORCH TIP

Address:1600 SOUTH CANAL STREET

City:PITTSBURGH

State:PA

ZIP:15215

Country:US

Inf

o Phone Num:412-781-4255

Emergency Phone Num:412-781-4255/800-424-9300(CHEMTREC)

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:NICKEL (SARA III)
CAS:7440-02-0
RTECS #:QR5950000
Fraction by Wt: 0.15%
Other REC Limits:NONE SPECIFIED
OSHA PEL:1 MG/M3
ACGIH TLV:1 MG/M3; 9192

Ingred Name:CARBON BLACK
CAS:1333-86-4
RTECS #:FF5800000
Fraction by Wt: .07-.12%
Other REC Limits:NONE SPECIFIED
OSHA PEL:3.5 MG/M3
ACGIH TLV:3.5 MG/M3; 9192

Ingred Name:MANGANESE (SARA III)
CAS:7439-96-5
RTECS #:OO9275000
Fraction by Wt: 1.6-2.1%
Other REC Limits:NONE SPECIFIED
OSHA PEL:(C) 5 MG/M3 DUST
ACGIH TLV:5 MG/M3 DUST 9293

Ingr
ed Name:MOLYBDENUM
CAS:7439-98-7
RTECS #:QA4680000
Fraction by Wt: 0.4-0.6%
Other REC Limits:NONE SPECIFIED
OSHA PEL:15 MG/M3 TDUST
ACGIH TLV:10 MG/M3; 9293

Ingred Name:PHOSPHOROUS (YELLOW) (SARA III)
CAS:7723-14-0
RTECS #:TH3500000
Fraction by Wt: 0.025%
Other REC Limits:NONE SPECIFIED
OSHA PEL:0.1 MG/M3
ACGIH TLV:0.1 MG/M3; 9192
EPA Rpt Qty:1 LB
DOT Rpt Qty:1 LB

Ingred Name:SILICON
CAS:7440-21-3
RTECS #:VW0400000
Fraction by Wt: 0.5-0.8%
Other REC Limits:NONE SPECIFIED
OSHA PEL:15 MG/M3 TDU

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ACGIH TLV:10 MG/M3 TDUST; 9293

Ingred Name:SULFUR
CAS:7704-34-9
RTECS #:WS4250000
Fraction by Wt: 0.025%
Other REC Limits:NONE SPECIFIED
OSHA PEL:13.0 MG/M3 MFR
ACGIH TLV:5.00 MG/M3 MFR

Ingred Name:COPPER (SARA III)
CAS:7440-50-8
RTECS #:GL5325000
Fraction by Wt: 0.50%
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:IRON OXIDE (BALANCE RANGES FROM 95.68 TO 96.73).
CAS:1309-37-1
RTECS #:NO7400
000
Fraction by Wt: BALANCE
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 =====
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LD50 LC50 Mixture:ORAL LD50 (RAT) IS UNKNOWN.
Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO
Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:NO
Health Hazards Acute and Chronic:ACUTE-WELDING FUMES MAY CAUSE
DISCOMFORT,DIZZINESS,NAUSEA & DRYNESS/IRRITATION OF THE
THROAT.CHRONIC-WELDING FUMES,
GASES/DUST MAY CAUSE PULMONARY
IRRITATION/PNEUMONITIS.IRON FUME MAY PRODUCE SIDEROSIS .NICKEL &
HEXAVALENT CHROMIUM HAVE BEENREPORTED TO BE CARCINOGENIC.
Explanation of Carcinogenicity:THIS MATERIAL CONTAINS NICKEL.
Effects of Overexposure:WELDING FUMES MAY CAUSE DISCOMFORT, DIZZINESS,
NAUSEA AND DRYNESS OR IRRITATION OF THE THROAT. FUMES, GASES OR
DUSTS MAY CAUSE PULMONARY IRRITATION OR PNEUMONITIS. IRON FUME MAY
PRODUCE SIDEROSIS. NIC KEL & HEXAVALENT CHROMIUM HAVE BEEN REP

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TO BE CARCINOGENIC.

Medical Cond Aggravated by Exposure: PERSONS WITH PRE-EXISTING
RESPIRATORY FUNCTION MAY BE MORE SUSCEPTIBLE TO THE EFFECTS OF THE
WELDING FUMES.

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First Aid Measures
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First Aid: GET MEDICAL CARE IF NEEDED. EYES: FLUSH WITH WATER FOR 15
MINUTES HOLDING EYELIDS OPEN. SKIN: WASH THOROUGHLY WITH SOAP &
WATER. INHALATION: REMOVE TO FRESH AIR. PROVIDE CPR IF
NEEDED. INGESTION: CALL A DOCTOR .

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Fire Fighting Measures
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Flash Point: NONE

Extinguishing Media: THIS ALLOY IS NONCOMBUSTIBLE. TO EXTINGUISH A METAL
POWDER FIRE, USE DRY SAND, DRY GRAPHITE OR OTHER CLASS "D" POWDER.

Fire Fighting Procedures: WEAR FIRE FIGHTING PROTECTIVE EQUIPMENT AND A
FULL FACED SELF CONTAINED BREATHING APPARATUS. COOL FIRE EXPOSED
CONTAINERS WITH WATER SPRAY.

Unusual Fire/Explosion Hazard: NONE. IN CONTACT WITH ACIDS, HYDROGEN GAS
WILL BE FORMED WHICH IS FLAMMABLE AND EXPL
OSIVE.

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Accidental Release Measures
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Spill Release Procedures: WEAR RESPIRATORY EQUIPMENT DURING CLEANUP. USE
EQUIPMENT THAT KEEPS MATERIAL FROM BECOMING AIRBORNE. TO MINIMIZE
DUST GENERATION I.E. WET MOP, HEPA VACUUM.

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Handling and Storage
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Handling and Storage Precautions: STORAGE-KEEP MATERIAL IN CLOSED
CONTAINERS AWAY FROM MOISTURE, STRONG OXIDIZERS & ACIDS.

Other Precautions: NO FOOD OR SMOKING IN
WORK AREAS. WASH THOROUGHLY
AFTER HANDLING. AVOID BREATHING FUMES AND VAPORS. DO NOT GET IN
EYES, ON SKIN OR ON CLOTHING.

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Exposure Controls/Personal Protection
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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 EXPOSURE BELOW
PEL, TLV OR STEL.

Ventilation: LOCAL EXHAUST AT THE ARC (OR FLAME), OR BOTH, TO KEEP TH

E

FUMES AND GASES BELOW PEL'S, TLV'S OR STEL'S IN BREATHING ZONE

Protective Gloves:WELDER'S GLOVE

Eye Protection:PROTECTIVE FACE SHIELD

Other Protective Equipment:EYE WASH STATION, APRONS, HATS, ARM & SHOULDER PROTECTION, AS WELL AS DARK SUBSTANTIAL CLOTHING.

Work Hygienic Practices:WEAR HEAD AND BODY PROTECTION WHICH HELP TO PREVENT INJURY FROM RADIATION, SPARKS AND ELECTRICAL SHOCK.

Supplemental Safety and Health

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

HCC:N1

Solubility in Water:INSOLUBLE

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

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

Stability Indicator/Materials to Avoid:YES

STRONG OXIDIZING AGENTS AND ACIDS

Stability Condition to Avoid:FLAMES

Hazardous Decomposition Products:METAL OXIDES. DECOMPOSITION PRODUCTS INCLUDE THOSE ORIGINIATING FROM INGREDIENTS + THOSE FROM THE BASE METAL & COATING.

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

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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 FEDERAL, STATE AN D LOCAL REGULATIONS

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