

NATIONAL WELDING ALLOYS, INC. -- BARE WIRE 69 -- 3439-01-100-4352
===== Product Identification =====

Product ID:BARE WIRE 69
MSDS Date:08/01/1990
FSC:3439
NIIN:01-100-4352
MSDS Number: BRQRQ
=== 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:412-781-4255/8
00-424-9300(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 =====

Ingred Name:ALUMINUM (SARA III)
CAS:7429-90-5
RTECS #:BD0330

000
Fraction by Wt: .4-1%
Other REC Limits:NONE SPECIFIED
OSHA PEL:15MG/M3 DUST/5 FUME
ACGIH TLV:10MG/M3 DUST; 9192

Ingred Name:CARBON
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

Ingred Name:CHROMIUM (SARA III)
CAS:7440-47-3
RTECS #:GB4200000
Fraction by Wt: 14-17%
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:COLUMBIUM
Fraction by Wt: .7-1.2%
Other REC Limits:NONE SPECIFIED

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
CAS:7439-89-6
RTECS #:NO4565500
Fraction by Wt: 5-9%
Other REC Limits:NONE SPECIFIED
OSHA PEL:10 MG/M3(FE2O3 FUME)
ACGIH TLV:5 MG/M3 (FE2O3 FUME)

Ingred Name:MANGANESE (SARA III)
CAS:7439-96-5
RTECS #:OO9275000
Fraction

by Wt: 1%
Other REC Limits:NONE SPECIFIED
OSHA PEL:(C) 5 MG/M3 DUST
ACGIH TLV:5 MG/M3 DUST 9293

Ingred Name:NICKEL (SARA III)
CAS:7440-02-0
RTECS #:QR5950000
Fraction by Wt: 70% MIN
Other REC Limits:NONE SPECIFIED
OSHA PEL:1 MG/M3
ACGIH TLV:1 MG/M3; 9192

Ingred Name:SILICON
CAS:7440-21-3
RTECS #:VW0400000
Fraction by Wt: 0.50%
Other REC Limits:NONE SPECIFIED
OSHA PEL:15 MG/M3 TDUST
ACGIH TLV:10 MG/M3 TDUST; 9293

Ingred Name:TITANIUM, METAL
CAS:7440-32-6
RTECS #:XR1700000
Fraction by Wt: 2-2.
75%
Other REC Limits:NONE SPECIFIED

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

LD50 LC50 Mixture:TLV FOR WELDING FUMES IS 5 MG/M3
Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO
Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:NO
Health Hazards Acute and Chronic:WELDING GENERATES FUMES, GASES AND
ELECTROMAGNETIC RADIATION WITH KNOWN ADVERSE HEALTH EFFECTS. THE
COMPOSITION OF WELDING EMISSIONS VARIES SUBSTANTIALY WITH THE
WELDING PROCESS.

Expla

nation of Carcinogenicity:NICKEL AND CHROMIUM ARE LISTED UNDER
IARC AND NTP.

Effects of Overexposure:SHORT TERM EXPOSURE TO WELDING FUMES MAY RESULT
IN DISCOMFORT, DIZZINESS, NAUSEA AND DRYNESS OR ITTITATION OF THE
THROAT. LONG TERM EXPOSURE TO WELDING FUMES, GASES OR DUST MAY
CONTRIBUTE TO PULMONARY IRRITATION OR PNEUMONOCONIOSIS. LONG TERM
EXPOSURE TO IRON FUMES MAY PRODUCE SIDEROSIS, WHICH IS REGARDED AS
BENIGN.

Medical Cond Aggravated by Exposure:INDIVIDUALS WITH IMPA

IRRED PULMONARY

FUNCTIONS OR ILLNESS MAY HAVE SYMPTOMS EXCERBATED BY IRRITANTS
CONTAINED IN WLEDING FUMES.

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

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

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

Extinguishing Media:THIS ALLOY IS NONCOMBUSTIBLE. USE EXTINGUISHING
MEDIA APPROPRIATE TO THE SURROUNDI
NG FIRE.

Fire Fighting Procedures:IF THSI MATERIAL IS REDUCED TO POWDER FORM,
CAUTION MUST BE USED TO PREVENT FIRE OR EXPLOSION. TO EXTINGUISH A
METAL FIRE USE DRY SAND, DRY GRAPHITE OR CLASS D.

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

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

Handling and Storage Precautions:NONE SPECIFIED BY MANUFACTURER.

Other Precautions:WELDING FUMES AND GASES CANNOT BE CLASS
IFIED SIMPLY.

THE COMPOSITION AND QUANTITY OF BOTH ARE DEPENDENT UPON THE METAL
WELDED, THE PROCESS, PROCEDURE AND ELECTRODES USED.

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

Respiratory Protection:USE RESPIRABLE FUMES 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:USE ENOUGH VENTILATION, LOCAL EXHAUST AT THE A
RC OR BOTH TO

KEEP FUMES & GASES BELOW PEL'S, TLV'S PR STEL'S.

Protective Gloves:WELDER'S GLOVES.

Eye Protection:HELMET OR FACE SHIELD WITH FILTER LENS.

Other Protective Equipment:SUBSTANTIAL DARK CLOTH, ARM PROTECTOR,
APRON, HAT AND SHOULDER PROTECTION. AIR SAMPLING TO DETERMINE
CORRECTIVE MEASURES

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

Supplemental Safety and Health

OTHER PRECAUTIONS: USE EXHAUST SYSTEM TO CLEAR WELDIN

G FUMES. MAKE SURE
THAT INHALED AIR DOES NOT CONTAIN FUME CONSTITUENTS ABOVE
PERMISSIBLE LEVELS.

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

HCC:N1

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

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

Stability Indicator/Materials to Avoid:YES

AVOID CONTACT WITH MINERAL ACIDS & STRONG OXIDIZING AGENTS WHICH MAY
GENERATE HYDROGEN GAS; MAY BE AN EXPLOSION HAZARD.

Stability Condit

ion to Avoid:NONE SPECIFIED BY MANUFACTURER.

Hazardous Decomposition Products:VARIOUS ELEMENTAL METALS & METAL

OXIDES MAY BE GENERATED FROM MELTING OR DROSS HANDLING OPERATIONS.

===== 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 FEDERAL, STATE AN D LOCAL REGU
LATIONS.

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