

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 W

t: .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 SUBSTANTIALLY 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 IRRITATION OF THE  
THROAT. LONG TERM EXPOSURE TO WELDING FUMES, GASES OR DUST MAY  
CONTRIBUTE TO PULMONARY IRRITATION OR PNEUMONOCYSTITIS. 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 APPROIPIATE 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 AND LOCAL REGU  
LATIONS.

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