

NATIONAL WELDING ALLOYS, INC. -- BARE WIRE 625(AWS A5.14) -- 3439-01-137-8523
===== Product Identification =====

Product ID:BARE WIRE 625(AWS A5.14)
MSDS Date:08/01/1990
FSC:3439
NIIN:01-137-8523
MSDS Number: BNBTQ
=== 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:412-781-4255/800-424-9300(CHEMTREC)
CAGE:0ACE2
=== Contractor Identification ===
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 #:BD0330000
Fraction by Wt: 0.40%
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: 0.10%
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: 20-23%
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: 3.1-4.1%
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: 5.00%
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: 0.50%
Other REC Limits:NONE SPECIFIED
OSHA PEL:(C) 5 MG/M3 DUST
ACGIH TLV:5 MG/M3 DUST 9293

Ingred Name:

MOLYBDENUM
CAS:7439-98-7
RTECS #:QA4680000
Fraction by Wt: 8-10%
Other REC Limits:NONE SPECIFIED
OSHA PEL:15 MG/M3 TDUST
ACGIH TLV:10 MG/M3; 9293

Ingred Name:NICKEL (SARA III)
CAS:7440-02-0
RTECS #:QR5950000
Fraction by Wt: >58.0%
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: 0.40%
Other REC Limits:NONE SPECIFIED

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===== Hazards Identification =====
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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:ACUTE: FUMES AND GASES CAN CAUSE EYES
AND UPPER RESPIRATORY SYSTEM IRRITATION, AND CENTRAL NERVOUS SYSTEM
EFFECTS. ARC RAYS CAN INJURE EYES AN
D BURN SKIN. ELECTRIC SHOCK CAN
KILL. NOISE CAN DAMAGE HEARING. CHRONIC: NEUROLOGICAL DAMAGE, LUNG
FIBROSIS, PNEUMOCONIOSIS.
Explanation of Carcinogenicity:NICKEL AND CHROMIUM ARE LISTED UNDER
IARC AND NTP.
Effects of Overexposure:SHORT TERM EXPOSURE: NAUSEA, FEVER, DIZZINESS,
DRYNESS, IRRITATION OF EYES, NOSE AND THROAT, SKIN SENSITIVITY.
ACUTE EXPOSURE: SAME SYMPTOMS TO HIGHER DEGREE AS WELL AS WATERY
EYES, HEADACHE, BREATHING DIFFICULTY, FREQUENT COUGHING, CHEST

PAINS.

Medical Cond Aggravated by Exposure:AGGRAVATION OF EXISTING RESPIRATORY OR ALLERGIC CONDITIONS.HIGHER LEVEL OF LUNG RELATED PROBLEMS AMONG SMOKERS.

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

First Aid:INHALATION: REMOVE FROM EXPOSURE. IF BREATHING IS DIFFICULT, GIVE OXYGEN. IF NOT BREATHING, GIVE CPR. IF NO DETECTABLE PULSE, GIVE HEART MASSAGE. EYES: FLUSH WITH LARGE AMOUNTS OF WATER FOR AT LEAST 1 5 MINUTES. SKIN: WASH WITH SOAP AND WATER.

INGESTION: SEEK MEDICAL ATTENTION.

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

Extinguishing Media:NON-FLAMMABLE. USE EXTINGUISHING MEDIA APPROPRIATE FOR SURROUNDING FIRE.

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:IF THIS MATERIAL IS REDUCED TO POWDER FORM, CAUTION MUST BE USED TO PREVENT FIRE OR EXPLOSION. TO

EXTINGUISH USE DRY SAND, DRY GRAPHITE.

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===== Accidental Release Measures =====

Spill Release Procedures:CLEAN UP ANY GRINDING DUST OR WASTE RESIDUE AND PLACE IN APPROPRIATE DISPOSAL CONTAINER. AVOID INHALATION AND SKIN EXPOSURE.

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

Handling and Storage Precautions:STORE IN DRY AREA. ELECTRODES EXPOSED TO MOISTURE MAY EXPLODE VIOLENTLY IF USED. DRY MOIST RODS BY BAKING AT 300F FOR TEN HOURS.

Other Precautions:TRAIN WELDER TO KEEP HIS HEAD OUT OF THE FUMES. MONITOR AIR TO ENSURE ACCEPTABLE EXPOSURES. AVOID ELECTRICAL SHOCK BY MAINTAINING DRY WORK AREA.

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

Respiratory Protection:FUME RESPIRATOR OR AIR SUPPLIED RESPIRATOR IN CONFINED SPACES OR WHERE VENTILATION DOES NOT KEEP EXPOSURE BELOW TLV.

Ventilation:LOCAL EXHAUST TO KEEP BELOW TLV.

Protective Gloves:WELDER'S GLOVES.

Eye Protec

tion: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
NONE.

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

HCC:N1

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

===== Stabi
lity and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES
STRONG OXIDIZING AGENTS

Stability Condition to Avoid:HIGH HEAT, OPEN FLAMES AND OTHER SOURCES
OF IGNITION

Hazardous Decomposition Products:FUMES OF METALS AND METAL OXIDES FROM
ELECTRODE AND BASE METAL, CARBON MONOXIDE, CARBON DIOXIDE, OZONE,
NITROGEN OXIDES.

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

Waste Disposal Methods:CONSULT WITH YOUR LOCAL ENVIRONMENTAL OFFICER.
DISPOSE OF FUMES, FLUX OR WELD GRINDING RESIDUE FROM THE WORK AREA
OR FROM FILTERS IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL
ENVIRONMENTAL REGULATIONS.

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