

NATIONAL WELDING ALLOYS, INC. -- BARE WIRE 312, AMS 5784 -- 3439-01-201-5517
===== Product Identification =====

Product ID:BARE WIRE 312, AMS 5784
MSDS Date:08/01/1990
FSC:3439
NIIN:01-201-5517
MSDS Number: BLJPC
=== 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 P
hone 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 - FUS

ED
CAS:60676-86-0
RTECS #:VV7328000
Fraction by Wt: 0.3-.65%
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 Qty:
5000 LBS
DOT Rpt Qty:5000 LBS

Ingred Name:MANGANESE (SARA III)
CAS:7439-96-5
RTECS #:OO9275000
Fraction by Wt: 1.0-2.5%
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: 0.15%
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: 28-32%
Other REC Limits:NONE SPECIFIED
OSHA PEL:1 MG/M

3

ACGIH TLV:0.5 MG/M3; 9192

EPA Rpt Qty:1 LB

DOT Rpt Qty:1 LB

Ingred Name:NICKEL (SARA III)

CAS:7440-02-0

RTECS #:QR5950000

Fraction by Wt: 8-10.5%

Other REC Limits:NONE SPECIFIED

OSHA PEL:1 MG/M3

ACGIH TLV:1 MG/M3; 9192

Ingred Name:MOLYBDENUM

CAS:7439-98-7

RTECS #:QA4680000

Fraction by Wt: 0.75%

Other REC Limits:NONE SPECIFIED

OSHA PEL:15 MG/M3 TDUST

ACGIH TLV:10 MG/M3; 9293

===== 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:SHORT TERM EXPOSURE TO WELDING FUMES, GASES OR DUST MAY RESULT IN DISCOMFORT SUCH AS DIZZINESS, NAUSEA, FEVER, DRYNESS AND/OR IRRITATION OF NOSE, THROAT AND EYES. SKIN SENSITIVITY MAY ALSO BE NOTED. LONG TERM EXPOSURE TO FUMES/GASES/DUST MAY CAUSE PULMONARY IRRITATION OR PNEUMOCONIOSIS; & SIDEROSIS FROM IRON FUMES.

Explanation of Carcinogenicity:NICKEL IS CONSIDERED ANTICIPATED

CARCINOGEN BY NTP. RESPIRATORY CANCER FROM WELDING IS UNCONFIRMED.

Effects of Overexposure:EXPOSURE TO WELDING FUMES MAY RESULT IN DISCOMFORT SUCH AS DIZZINESS, NAUSEA, FEVER, DRYNESS AND/OR IRRITATION OF NOSE, THROAT AND EYES. SKIN SENSITIVITY MAY ALSO BE NOTED. WATERY EYES, HEADACHE, BREATHING 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 =====

First Aid:IN CASE OF ELECTRICAL SHOCK, TURN OFF POWER PRIOR TO REMOVAL FROM EXPOSURE AREA AND ADMINISTRATION OF FIRST AID. REMOVE FROM EXPOSURE AREA AND CALL FOR MEDICAL AID. ADMINISTER OXYGEN IF BREATHING IS DIFFICULT. IF NOT BREATHING, BEGIN ARTIFICIAL RESPIRATION. IF NO DETECTABLE PULSE, BEGIN EXTERNAL HEART MASSAGE.

EMPLOY FIRST AID TECHNIQUES RECOMMENDED BY THE AMERICAN RED CROSS.

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

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

Fire Fighting Procedures:TO EXTINGUISH A METAL POWDER FIRE USE DRY SAND, OR CLASS D FIRE EXTINGUISHERS. USE WATER SPRAY TO COOL NEARBY CONTAINERS EXPOSED TO FIRE.

Unusual Fire/Explosion Hazard:FIRE OR EXCESSIVE HEAT MAY CAUSE PRODUCTION OF HAZARDOUS DECOMPOSITION PRODUCTS.

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

Spill Release Procedures:CLEAN UP ANY GRINDING DUST OR WASTE RESIDUES AND PLACE IN SUITABLE DOT APPROVED CONTAINERS AND DISPOSE OF IN FULL COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS. AVOID INHALATION AND SKIN EXPOSURE.

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

Handling and Storage Precautions:WEAR GLOVES AND FLAME RETARDANT CLOTHING WHEN CUTTING, GRINDING OR WELDING. DO NOT EXPOSE SKIN TO RADIATION WHEN HOT CUTTING OR WELDING.

Other Precautions:PROVIDE PROTECTIVE SCREENS TO SHIELD OTHERS. WHEN ELECTRODES AND FLUXES ARE CONSUMED, THE FUME AND GAS DECOMPOSITION PRODUCTS GENERATED ARE DIFFERENT IN FORM FROM THE INGREDIENTS LISTED. NEW COMPOUNDS NOT IN THE ELECTRODES MAY FORM.

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

Respiratory Protection:USE WELD FUME RESPIRATOR OR AIR SUPPLIED

RESPIRATOR WHEN CUTTING, GRINDING OR WELDING IN A CONFINED SPACE OR WHERE LOCAL EXHAUST OR GENERAL VENTILATION DOES NOT KEEP EXPOSURE BELOW RECOMMENDED LIMITS. USE ONLY NIOSH APPROVED RESPIRATORS.

Ventilation:USE ENOUGH VENTILATION WHEN CUTTING, GRINDING OR WELDING TO KEEP THE DUST, FUMES & GASES FROM THE WORKERS BREATHING ZONE

Protective Gloves:FLAMEPROOF GAUNTLER GLOVES

Eye Protection:OSHA APPROVED GOGGLES/FACE SHIELD W/LENS

Other Protective Equipment:FLAME RETARDANT CLOTHING WHE

N CUTTING,

GRINDING OR WELDING. DO NOT EXPOSE SKIN TO RADIATION WHEN HOT CUTTING OR WELDING.

Work Hygienic Practices:WASH THOROUGHLY BEFORE EATING OR SMOKING.

LAUNDER CONTAMINATIED CLOTHING BEFORE REUSE.

Supplemental Safety and Health

WELDING AND HOT CUTTING FUMES & GASES CANNOT BE CLASSIFIED SIMPLY.

THEIR COMPOSITION AND QUANTITY ARE DEPENDENT ON THE METAL BEING

WELDED, THE PROCEDURES, PROCESSES AND THE TYPE OF WIRE OR

ELECTRODES USED. OTHER INFLUENCING FACTORS ARE THEPR

ESENCE OF

CONTAMINANTS. CHLORINATED SOLVENTS MAY DECOMPOSE TO TOXIC GASES.

===== 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

MINERAL ACIDS AND STRONG OXIDIZING AGENTS

Stability Condition to Avoid:NONE

Hazardous Decomposition Products:WELDING/CUTTING OPERATIONS MAY INCLUDE ELEMENTAL METAL

S, OXIDES OF THE METALS, FUMES/GASES &

ELECTROMAGNETIC RADIATION.

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

Waste Disposal Methods:DISPOSE I/A/W FEDERAL, STATE & LOCAL REGULATIONS. CHROMIUM IS REGULATED BY EPA.

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