

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/

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 =====

Ingred Name:ALUMINUM (SARA III)

CAS:7429-90-5

RTECS #:BD033

0000

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

Fractio

n 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

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===== 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.

Expl
anation 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 PNEUMONOCOCONIOSIS. LONG TERM
EXPOSURE TO IRON FUMES MAY PRODUCE SIDEROSIS, WHICH IS REGARDED AS
BENIGN.

Medical Cond Aggravated by Exposure:INDIVIDUALS WITH IMP

A I R E D P U L M O N A R Y

F U N C T I O N S O R I L L N E S S M A Y H A V E S Y M P T O M S E X C E R B A T E D B Y I R R I T A N T S
C O N T A I N E D I N W E L D I N G F U M E S .

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

F i r s t A i d : R E M O V E F R O M D U S T O R F U M E S E X P O S U R E . I F B R E A T H I N G H A S S T O P P E D
P E R F O R M A R T I F I C I A L R E S P I R A T I O N . S U M M O N M E D I C A L A I D I M M E D I A T E L Y .

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

E x t i n g u i s h i n g M e d i a : T H I S A L L O Y I S N O N C O M B U S T I B L E . U S E E X T I N G U I S H I N G
M E D I A A P P R O P I A T E T O T H E S U R R O U N D
I N G F I R E .

F i r e F i g h t i n g P r o c e d u r e s : I F T H I S M A T E R I A L I S R E D U C E D T O P O W D E R F O R M ,
C A U T I O N M U S T B E U S E D T O P R E V E N T F I R E O R E X P L O S I O N . T O E X T I N G U I S H A
M E T A L F I R E U S E D R Y S A N D , D R Y G R A P H I T E O R C L A S S D .

U n u s u a l F i r e / E x p l o s i o n H a z a r d : N O U N U S U A L F I R E O R E X P L O S I O N H A Z A R D A R E
A S S O C I A T E D W I T H T H I S M A T E R I A L .

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

H a n d l i n g a n d S t o r a g e P r e c a u t i o n s : N O N E S P E C I F I E D B Y M A N U F A C T U R E R .

O t h e r P r e c a u t i o n s : W E L D I N G F U M E S A N D G A S E S C A N N O T B E C L A S
S I F I E D S I M P L Y .

T H E C O M P O S I T I O N A N D Q U A N T I T Y O F B O T H A R E D E P E N D E N T U P O N T H E M E T A L
W E L D E D , T H E P R O C E S S , P R O C E D U R E A N D E L E C T R O D E S U S E D .

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

R e s p i r a t o r y P r o t e c t i o n : U S E R E S P I R A B L E F U M E S R E S P I R A T O R O R A I R S U P P L I E D
R E S P I R A T O R W H E N W E L D I N G , B R A Z I N G O R S O L D E R I N G I N C O N F I N E D S P A C E O R
W H E R E L O C A L E X H A U S T O R V E N T I L A T I O N D O E S N O T K E E P E X P O S U R E B E L O W
P E L , T L V O R S T E L .

V e n t i l a t i o n : U S E E N O U G H V E N T I L A T I O N , L O C A L E X H A U S T A T T H E
A R C O R B O T H T O

K E E P F U M E S & G A S E S B E L O W P E L ' S , T L V ' S O R S T E L ' S .

P r o t e c t i v e G l o v e s : W E L D E R ' S G L O V E S .

E y e P r o t e c t i o n : H E L M E T O R F A C E S H I E L D W I T H F I L T E R L E N S .

O t h e r P r o t e c t i v e E q u i p m e n t : S U B S T A N T I A L D A R K C L O T H , A R M P R O T E C T O R ,
A P R O N , H A T A N D S H O U L D E R P R O T E C T I O N . A I R S A M P L I N G T O D E T E R M I N E
C O R R E C T I V E M E A S U R E S

W o r k H y g i e n i c P r a c t i c e s : W A S H H A N D S T H O R O U G H L Y B E F O R E E A T I N G , S M O K I N G O R
U S I N G S A N I T A R Y F A C I L I T I E S .

S u p p l e m e n t a l S a f e t y a n d H e a l t h

O T H E R P R E C A U T I O N S : U S E E X H A U S T S Y S T E M T O C L E A R W E L D I

NG 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 Condi

tion 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 REG
ULATIONS.

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