Product ID:BAG-3(S-50 N) GRADE V

MSDS Date:08/01/1990

FSC:3439

NIIN:00-224-3561

MSDS Number: BKSJV === 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, 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: COPPER (SARA III)

CAS:7440-50-8

RTECS #:GL5325000 Fraction by Wt: 15.5% 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: SILVER (SARA III)

CAS:7440-22-4

RTECS #:VW3500000 Fraction by Wt: 50.0%

Other REC Limits: NONE SPECIFIED

OSHA PEL:0.01 MG/M3 ACGIH TLV:0.1 MG/M3; 9192

EPA Rpt Qty:1 LB DOT Rpt Qty:1 LB

Ingred Name:ZINC OXIDE

CAS:1314-13-2

RTECS #:ZH4810000 Fraction by Wt: 15.5%

Other REC Limits:NONE SPECIFIED OSHA PEL:15MG/M3 TDUST/5 FUME ACGIH TLV:10MG/M3 TDUST; 9293

Ingred Name:CADMIUM

OXIDE (SARA III) CAS:1306-19-0 RTECS #:EV1925000

Fraction by Wt: 16.0%

Other REC Limits: NONE SPECIFIED BY M.

OSHA PEL:SEE 1910.1027

ACGIH TLV:0.05 MG(CD)/M3; 9293

Ingred Name: NICKEL (SARA III)

CAS:7440-02-0

RTECS #:QR5950000 Fraction by Wt: 3.0%

Other REC Limits: NONE SPECIFIED

OSHA PEL:1 MG/M3

ACGIH TLV:1 MG/M3; 9192

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

Routes of Entry: Inhalation:YES Skin:NO Ingestion:YES Reports of Carcinogenicity:NTP:YES IARC:YES O

SHA:NO

Health Hazards Acute and Chronic:SHORT TERM EXPOSURE TO WELDING/BRAZING 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. ACUTE EXPOSURE FROM SOME TOXIC GASES MAY CAUSE PULMONARY EDEMA, ASPHYXIATION AND EXCESSIVE EXPOSURE CAN BE FATAL.

Explanation of Carcinogenicity:NICKEL IS LISTED AS CARCINOGENIC BY NTP, IARC AND EPA. AND CADMIUM IS LISTED AS ANT ICIPATED CARCINOGEN.

Effects of Overexposure:IRRITATION OF EYES, NOSE, THROAT, DIFFICULTY IN BREATHING, ASPHYXIATION AND PULMONARY EDEMA.

Medical Cond Aggravated by Exposure: DISEASE OF THE SKIN AND LUNG.

=======================================		=======================================
---	--	---

First Aid:REMOVE INDIVIDUAL FROM EXPOSURE AND CONSULT A PHYSICIAN. FOR METAL BURNS, EXPOSURE AREAS SHOULD BE COOLED WITH WATER, AND MEDICAL ATTENTION SOUGHT. EYES:FLUSH WITH WATER FOR 15 MINUTES. INHALATION:R

E MOVE TO FRESH AIR. PROVIDE CPR/OXYGEN AS NEEDED. GET MEDICAL HELP IF SYMPTOMS PERSIST.

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

Extinguishing Media:USE DRY CHEMICAL., OR CLASS D FIRE EXTINGUISHERS. Fire Fighting Procedures:WEAR FIRE FIGHTING PROTECTIVE EQUIPMENT AND A FULL FACED SELF CONTAINED BREATHING APPARATUS. EVACUATE AREA. COOL FIRE EXPOSED CONTAINERS WITH WATER SPRAY.

Unusual Fire/Explosion Hazard:HEAT OF FIRE MAY PRODUCE HAZARDOUS METAL FUM

ES.

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

Spill Release Procedures:PICK UP METAL RODS. VACUUMING OF IS DUST IS RECOMMENDED. DRY SWEEPING OF DUST MAY RESULT IN HIGH CONCENTRATIONS OF AIRBORNE DUST.

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

Handling and Storage Precautions: AVOID ACCIDENTAL INGESTION BY USING GOOD PERSONAL HYGIENE PRACTICES. WASH THOROUGHLY BEFORE EATING OR SMOKING.

Other Precautions: AVOID INHALING FUMES OR

DUST.
====== Exposure Controls/Personal Protection ========
Respiratory Protection: A NIOSH/MSHS APPROVED LEAD DUST/FUME RESPIRATOR SHOULD BE WORN WHERE APPLICABLE LIMITS MAY BE EXCEEDED. Ventilation: LOCAL EXHAUST OR MECHANICAL (GENERAL) VENTILATION IS ADEQUATE.
Protective Gloves:CANVAS, LEATHER OR HEAT RESISTANT. Eye Protection:SAFETY GLASSES WITH A FACE SHIELD. Other Protective Equipment:WEAR FACE SHIELD AND IMPERVIOUS APRON WHEN SPLASHING OF MOLTEN METAL IS LIKELY.
Work Hygienic Practices:GOOD HOUSEKEEPING PROCEDURES SHOULD BE MAINTAINED, AND PERSONNEL SHOULD WASH THOROUGHLY BEFORE EATING OR SMOKING.
Supplemental Safety and Health FOOD AND DRINK SHOULD NOT BE CONSUMED OR TOBACCO PRODUCTS USED, NOR COSMETIC APPLIED IN AREAS WHERE METAL EXPOSURE ARE POSSIBLE.
======== Physical/Chemical Properties =========
HCC:N1 Melt/Freeze Pt:M.P/F.P Text:1170F,632C Solubility in Water:INSOLUBLE Appearance and Odor:METALLIC WIRE, ROD OR STRIP. NO ODOR
========= Stability and Reactivity Data =========
Stability Indicator/Materials to Avoid:YES STRONG ACIDS AND BASES. Stability Condition to Avoid:NONE Hazardous Decomposition Products:METAL OXIDE/METAL FUMES MAY BE EVOLVED.
======= Disposal Considerations ==========
Waste Disposal Methods:SCRAP OR WASTE SHOULD BE RECYCLED OR DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.
Disclaimer (provided with this i

nformation by the compiling agencies):
This information is formulated for use by elements of the Department of Defense. The United States of America in no manner whatsoever, expressly or implied, warrants this information to be accurate and disclaims all liability for its use. Any person utilizing this document should seek competent professional advice to verify and assume responsibility for the suitability of this information to their particular situation.