

HARRIS WELCO -- ER80S-B2 -- 3439-01-347-4485

===== Product Identification =====

Product ID:ER80S-B2

MSDS Date:07/01/1993

FSC:3439

NIIN:01-347-4485

MSDS Number: BVYLV

=== Responsible Party ===

Company Name:HARRIS WELCO

Address:1051 YORK RD

City:KINGS MOUNTAIN

State:NC

ZIP:28086

Country:US

Info Phone Num:800-424-9300(CHEMTREC)

Emergency Phone Num:800-424-9300(CHEMTREC)

CAGE:HO911

=== Contractor Iden

tification ===

Company Name:HARRIS WELCO

Address:1051 YORK RD

Box:City:KINGS MOUNTAIN

State:NC

ZIP:28086

Country:US

Phone:704-739-6421

CAGE:HO911

Company Name:THERMACOTE-WELCO CO SUB OF FOSTER WHEELER CORP

Address:YORK RD

Box:828

City:KINGS MOUNTAIN

State:NC

ZIP:28086

Country:US

CAGE:24559

===== Composition/Information on Ingredients =====

Ingred Name:IRON

CAS:7439-89-6

RTECS #:NO4565500

Fraction by Wt: 90-99%

Ingred Name:MANGANESE (SARA III)

CAS:7439-96-5

RTECS #:OO9275000

Fraction by Wt: 0.5-2.0%
OSHA PEL:5 MG/M3
ACGIH TLV:5 MG/M3, DUST

Ingred Name:SILICON
CAS:7440-21-3
RTECS #:VW0400000
Fraction by Wt: 0.2-1.0%
OSHA PEL:10 MG/M3 TDUST
ACGIH TLV:10 MG/M3 TDUST

Ingred Name:CHROMIUM (SARA III)
CAS:7440-47-3
RTECS #:GB4200000
Fraction by Wt: 0-6.0%
OSHA PEL:1 MG/M3
ACGIH TLV:0.5 MG/M3
EPA Rpt Qty:1 LB
DOT Rpt Qty:1 LB

Ingred Name:MOLYBDENUM
CAS:7439-98-7
RTECS #:QA4680000
Fraction by Wt: 0-1.6%
OSHA PEL:10 PPM
ACGIH TLV:10 PPM

Ingred Name:VANADIUM (SARA III)
CAS:7440-62-2
RTECS #:YW1355000
Fraction by Wt: 0-.25%

Ingred Name:COBALT (SARA III)
CAS:7440-48-4
RTECS #:GF8750000
Fraction by Wt: 0-.1.5%
OSHA PEL:0.05 MG/M3
ACGIH TLV:0.05 MG/M3;DUST

Ingred Name:TUNGSTEN
CAS:7440-33-7
RTECS #:YO7175000
Fraction by Wt: 7-10%
OSHA PEL:5 MG/M3
ACGIH TLV:5 MG/M3

Ingred Name:GRAPHITE (NATURAL)
CAS:7782-42-5
RTECS #:MD9659600
Fraction by Wt: 0.5%
OSHA PEL:15 MPPCF
ACGIH TLV:2 MG/M3 RDUST

Ingred Name:SUPP DATA: THE 5 MG/M3 GENERAL FUME LEVEL. GASEOUS RXN
P

RODS MAY INCL CARBON MONOXIDE & CARBON DIOXIDE. OZONE(SUPP DATA)

Ingred Name:ING 10: NITROGEN OXIDES MAY BE FORMED BY RADIATION FROM THE ARC, IN ADDITION TO SHIELDING GASES LIKE ARGON & (ING 12)

Ingred Name:ING 11: HELIUM WHENEVER THEY ARE EMPLOYED. ONE RECOMM WAY TO DETERMINE COMPOSITION & QTY OF FUMES & GASES TO (ING 13)

Ingred Name:ING 12: WORKERS ARE EXPOS IS TO TAKE AN AIR SAMPLE FROM INSIDE THE WORKERS BRTHG ZONE. SEE AWS F1.1 & AWS F1.2,(ING 14)

Ingred Name:ING 13: 2985,
AVAIL FROM AMERICAN WELDING SOCIETY. SEE AWS
PUBL "FUMES & GASES IN THE WELDING ENVIRONMENT" & (ING 15)

Ingred Name:ING 14:"GASES IN THE WELDING ENVIRONMENT".

Ingred Name:VENT: GENERAL AREA. TRAIN WELDER TO KEEP HIS HEAD OUT OF THE FUMES.

Ingred Name:EYE PROT: WITH FILTER LENS. PROVIDE PROTECTIVE SCREENS & FLASH GOGGLES, IF NECESSARY TO SHIELD OTHERS.

Ingred Name:OTHER PROT EQUIP: LIVE ELECTRICAL PARTS & INSULATE HIMSELF FROM WORK & GROUND.

Ingred Name:EXPLAN OF CARCIN: CAR
CINOGENIC. HUMAN/ANIMAL:LUNG CANCER,
SKIN. COBALT: IARC MONOGRAPHS ON THE EVALUATION(ING 20)

Ingred Name:ING 19: OF CARCINOGENIC RISK OF CHEMICALS TO MAN, VOL 52,
PG 363, 1991: GROUP 2B. ANIMAL: PULM FIBROSIS(BLOOD EFTS).

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

LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER.

Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO

Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:NO

Health Hazards Acute and Chronic:FU

MES & GASES CAN BE DANGEROUS TO YOUR

HEALTH. SHORT TERM OVEREXPOSURE MAY RESULT IN DIZZINESS, NAUSEA, OR DRYNESS OR IRRITATION OF NOSE, THROAT, & EYES. ARC RAYS CAN INJURE EYES & BURN SKIN. ELECTRIC SHOCK CAN KILL.HEAT RAYS (INFRARED RADIATION FLAME OR HOT METAL) CAN INJURE EYES.

Explanation of Carcinogenicity:CHROMIUM: IARC MONOGRAPHS, VOL 49, PG 49, 1990: GROUP 1. NTP 7TH ANNUAL REPORT ON CARCINOGENS, 1994: KNOWN TO BE(ING 19)

Effects of Overexposure:SEE HEALTH HAZARDS.

Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

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

First Aid:EYES: IMMED FLUSH W/POTABLE WATER FOR A MINIMUM OF 15 MINS.
SEEK ASSISTANCE FROM MD. SKIN: FLUSH WITH COPIOUS AMOUNTS OF WATER.
CALL MD. INGEST: GET MD IMMEDIATELY. INHAL: REMOVE TO FRESH AIR:
SUPPORT BREATHING(GIVE O*2/ARTF RESP).

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

Extinguishing Media:USE MEDIA SUIT
ABLE FOR SURROUNDING FIRE.
Fire Fighting Procedures:NON FLAMMABLE. WELDING ARC & SPARKS CAN IGNITE
COMBUSTIBLES. WEAR NIOSH/MSHA APPROVED SCBA & FULL PROTECTIVE
EQUIPMENT.
Unusual Fire/Explosion Hazard:NO KNOWN HAZARD IF NORMAL SAFETY
PRECAUTIONS.

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

Spill Release Procedures:NOT APPLICABLE.
Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling
and Storage Precautions:NOT APPLICABLE.
Other Precautions:NOT APPLICABLE.

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

Respiratory Protection:USE NIOSH/MSHA APPROVED RESPIRABLE FUME
RESPIRATOR OR AIR SUPPLIED RESPIRATOR WHEN WELDING, BRAZING, OR
SOLDERING IN CONFINED SPACE OR WHERE LOCAL EXHAUST OF VENTILATION
DOES NOT KEEP EXPOSURE BELOW T LV.

Ventilation:USE ENOUGH VENT, LOCAL EXHAUST AT THE ARC(OR FLAME) OR
BOTH, TO KEEP FUMES & GASES FROM WORKERS BRT
HG ZONE & (ING 16)

Protective Gloves:WELDER'S GLOVES RECOMMENDED.

Eye Protection:WEAR HELMET/USE FACE SHIELD(ING 17)

Other Protective Equipment:WEAR HAND & HEAD PROT WHICH HELP TO PVNT
INJRY FROM RADIA,SPARKS & ELEC SHOCK. TRAIN WELDER NOT TO TOUCH
(ING 18)

Work Hygienic Practices:NOT APPLICABLE.

Supplemental Safety and Health

HAZ DECOMP:LISTED. REASONABLY EXPECTED FUME CONSTITUENTS OF THIS PROD
WOULD INCL - OXIDES OF IRON. SECONDARY COMPLEX OXIDES OF MANGANESE,
SILICON, CHROMIUM

, MOLYBDENUM & VANADIUM. THE PRESENT OSHA PERMISSIBLE EXPOS LIMITS FOR HEXAVALENT CHROMIUM IS 0.05 MG/M3 WHICH WILL RESULT IN SIGNIFICANT REDUCTIONS FROM (ING 10)

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

Appearance and Odor:NONE SPECIFIED BY MANUFACTURER.

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES
NOT APPLICABLE.

Stability Condition to Avoid:NONE.

Hazardous Decomposition Products:WHEN FILLER METAL IS CONSUMED, FUME &

GAS DECOMP PRODS GENERATED ARE DIFFERENT IN PERCENT & FORM FROM
INGS (SUPP DATA)

===== 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 & LOCAL REGULATIONS.

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