

HARRIS WELCO THERMACOTE WELCO -- E70S-2
MATERIAL SAFETY DATA SHEET
NSN: 343900N067205
Manufacturer's CAGE: 34920
Part No. Indicator: A
Part Number/Trade Name: E70S-2

General Information

Company's Name: HARRIS WELCO/THERMACOTE WELCO
Company's Street: 1051 YORK RD
Company's City: KINGS MOUNTAIN
Company's State: NC
Company's Country: US
Company's Zip Code: 28086
Company's Emerg Ph #: 800-424-9300 (CHEMTREC)
Company's Info Ph #: 704-739-6421
Record No. For Safety Entry: 001
Tot Safety Entries This Stk#: 001
Status: SMJ
Date MSDS Prepared: 01JUL93
Safety Data Review Date: 12DEC95
MSDS Serial Number: CBWPX

Ingredients/Identity Information

Proprietary: NO
Ingredient: CARBON BLACK; (CARBON)
Ingredient Sequence Number: 01
Percent: >0.50
NIOSH (RTECS) Number: FF5800000
CAS Number: 1333-86-4
OSHA PEL: 3.5 MG/M3
ACGIH TLV: 3.5 MG/M3

Proprietary: NO
Ingredient: MANGANESE (SARA 313)
Ingredient Sequence Number: 02
Percent: >2.50
NIOSH (RTECS) Number: O09275000
CAS Number: 7439-96-5
OSHA PEL: C 5 MG/M3 DUST
ACGIH TLV: 5 MG/M3 DUST

Proprietary: NO
Ingredient: SILICON
Ingredient Sequence Number: 03
Percent: >1.50
NIOSH (RTECS) Number: VW0400000
CAS Number: 7440-21-3
OSHA PEL: 15 MG/M3 TDUST
ACGIH TLV: 10 MG/M3 TDUST

Proprietary: NO
Ingredient: COPPER (SARA 313) (CERCLA)
Ingredient Sequence Number: 04
Percent: >0.50
NIOSH (RTECS) Number: GL5325000
CAS Number: 7440-50-8
OSHA PEL: 0.1MG/M3 FUME/1 DUST
ACGIH TLV: 0.2 MG/M3 FUME

Proprietary: NO

Ingredient: MOLYBDENUM
Ingredient Sequence Number: 05
Percent: >0.75
NIOSH (RTECS) Number: QA4680000
CAS Number: 7439-98-7
OSHA PEL: 10 PPM
ACGIH TLV: 10 PPM

Proprietary: NO
Ingredient: ALUMINUM (SARA 313)
Ingredient Sequence Number: 06
Percent: >0.50
NIOSH (RTECS) Number: BD0330000
CAS Number: 7429-90-5
OSHA PEL: 15 MG/M3 DUST
ACGIH TLV: 10 MG/M3 DUST

Proprietary: NO
Ingredient: TITANIUM
Ingredient Sequence Number: 07
Percent: >0.50
NIOSH (RTECS) Number: XR1700000
CAS Number: 7440-32-6
OSHA PEL: N/K (FP N)
ACGIH TLV: 10 MG/M3

Proprietary: NO
Ingredient: ZIRCONIUM
Ingredient Sequence Number: 08
Percent: >0.50
NIOSH (RTECS) Number: ZH7070000
CAS Number: 7440-67-7
OSHA PEL: 5 MG/M3
ACGIH TLV: 5 MG/M3/10 STEL

Proprietary: NO
Ingredient: IRON
Ingredient Sequence Number: 09
Percent: BALANCE
NIOSH (RTECS) Number: NO4565500
CAS Number: 7439-89-6
OSHA PEL: N/K (FP N)
ACGIH TLV: 5 MG/M3

Proprietary: NO
Ingredient: SUP DAT: DIFFERENT IN PERCENT & FORM FROM INGS. FUME & GAS
DECOMP PRODS, & NOT INGS IN ELECTRODE, ARE IMPORTANT. (ING 11)
Ingredient Sequence Number: 10
NIOSH (RTECS) Number: 9999999ZZ
OSHA PEL: NOT APPLICABLE
ACGIH TLV: NOT APPLICABLE

Proprietary: NO
Ingredient: ING 10: CONC OF GIVEN FUME/GAS COMPONENT MAY DECR/INCR BY MANY
TIMES ORIGINAL CONC IN ELECTRODE. NEW CMPDS NOT (ING 12)
Ingredient Sequence Number: 11
NIOSH (RTECS) Number: 9999999ZZ
OSHA PEL: NOT APPLICABLE
ACGIH TLV: NOT APPLICABLE

Proprietary: NO
Ingredient: ING 11: IN ELECTRODE MAY FORM. DECOMP PRODS OF NORMAL
OPERATION INCL THOSE ORIGINATING FROM VOLATILIZATION, (ING 13)
Ingredient Sequence Number: 12

NIOSH (RTECS) Number: 9999999ZZ
OSHA PEL: NOT APPLICABLE
ACGIH TLV: NOT APPLICABLE

Proprietary: NO
Ingredient: ING 12: RXN, OXIDATION OF MATLS IN INGS SECTION, PLUS THOSE FROM BASE METAL & COATING. REASONABLY EXPECTED FUME (ING 14)
Ingredient Sequence Number: 13
NIOSH (RTECS) Number: 9999999ZZ
OSHA PEL: NOT APPLICABLE
ACGIH TLV: NOT APPLICABLE

Proprietary: NO
Ingredient: ING 13: CONSTITUENTS OF PROD COULD INCL PRIMARILY OXIDES OF IRON; SECONDARILY COMPLEX OXIDES OF MANGANESE & (ING 15)
Ingredient Sequence Number: 14
NIOSH (RTECS) Number: 9999999ZZ
OSHA PEL: NOT APPLICABLE
ACGIH TLV: NOT APPLICABLE

Proprietary: NO
Ingredient: ING 14: SILICON & ALUMINUM. GASEOUS RXN PRODS: CARBON MONOXIDE, CARBON DIOXIDE. OZONE & NITROGEN OXIDES MAY BE (ING 16)
Ingredient Sequence Number: 15
NIOSH (RTECS) Number: 9999999ZZ
OSHA PEL: NOT APPLICABLE
ACGIH TLV: NOT APPLICABLE

Proprietary: NO
Ingredient: ING 15: FORMED BY RADIA FROM ARC, & SHIELDING GASES WHEN EMPLOYED. ONE REC WAY TO DETERMINE COMPOSITION & QTY (ING 17)
Ingredient Sequence Number: 16
NIOSH (RTECS) Number: 9999999ZZ
OSHA PEL: NOT APPLICABLE
ACGIH TLV: NOT APPLICABLE

Proprietary: NO
Ingredient: ING 16: OF FUMES & GASES TO WHICH WORKERS ARE EXPOSED IS TO TAKE AIR SAMPLE FROM INSIDE WELDERS HELMET OR IN (ING 18)
Ingredient Sequence Number: 17
NIOSH (RTECS) Number: 9999999ZZ
OSHA PEL: NOT APPLICABLE
ACGIH TLV: NOT APPLICABLE

Proprietary: NO
Ingredient: ING 17: WORKING ZONE. SEE AWS F1.1 AND AWS F1.2-1985, AVAILABLE FROM AMERICAN WELDING SOCIETY. SEE AWS (ING 19)
Ingredient Sequence Number: 18
NIOSH (RTECS) Number: 9999999ZZ
OSHA PEL: NOT APPLICABLE
ACGIH TLV: NOT APPLICABLE

Proprietary: NO
Ingredient: ING 18: PUBLICATION: "FUMES AND GASES IN THE WELDING ENVIRONMENT".
Ingredient Sequence Number: 19
NIOSH (RTECS) Number: 9999999ZZ
OSHA PEL: NOT APPLICABLE
ACGIH TLV: NOT APPLICABLE

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Physical/Chemical Characteristics

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Appearance And Odor: N/A
Boiling Point: N/A

Melting Point: N/A
Vapor Pressure (MM Hg/70 F): N/A
Vapor Density (Air=1): N/A
Specific Gravity: N/A
Decomposition Temperature: N/A
Evaporation Rate And Ref: N/A
Solubility In Water: N/A
Percent Volatiles By Volume: N/A
pH: N/A
Corrosion Rate (IPY): N/A

Fire and Explosion Hazard Data

Flash Point: N/A
Lower Explosive Limit: N/A
Upper Explosive Limit: N/A
Extinguishing Media: USE MEDIA SUITABLE FOR SURROUNDING FIRE (FP N).
Special Fire Fighting Proc: WEAR NIOSH/MSHA APPRVD SCBA & FULL PROT EQUIP (FP N). WELDING ARC & SPARKS CAN IGNITE COMBUST & FLAMM. REFER TO AMERICAN NATL STD Z49.1 FOR FIRE (SUP DAT)
Unusual Fire And Expl Hazrds: NONE SPECIFIED BY MANUFACTURER.

Reactivity Data

Stability: YES
Cond To Avoid (Stability): NONE.
Materials To Avoid: NONE.
Hazardous Decomp Products: COMPOSITION & QUALITY OF WELDING FUMES & GASES ARE DEPENDENT UPON METAL BEING WELDED, PROCESS, & ELECTRODE (SUP DAT)
Hazardous Poly Occur: NO
Conditions To Avoid (Poly): NOT RELEVANT.

Health Hazard Data

LD50-LC50 Mixture: NONE SPECIFIED BY MANUFACTURER.
Route Of Entry - Inhalation: YES
Route Of Entry - Skin: YES
Route Of Entry - Ingestion: YES
Health Haz Acute And Chronic: ACUTE: ELECTRIC ARC WELDING MAY CREATE THE FOLLOWING: FUMES AND GASES CAN BE DANGEROUS TO YOUR HEALTH. ARC RAYS CAN INJURE EYES AND BURN SKIN. ELECTRIC SHOCK CAN KILL.
Carcinogenicity - NTP: NO
Carcinogenicity - IARC: NO
Carcinogenicity - OSHA: NO
Explanation Carcinogenicity: NOT RELEVANT.
Signs/Symptoms Of Overexp: SHORT TERM: DIZZINESS, NAUSEA, DRYNESS AND IRRITATION OF NOSE, THROAT, EYES, CHEST TIGHTNESS, FEVER, ALLERGIC REACTION. OVEREXPOSURE TO FUMES: SIDEROSIS POSSIBLE, MAY AFFECT PULMONARY FUNCTION.
Med Cond Aggravated By Exp: NONE SPECIFIED BY MANUFACTURER.
Emergency/First Aid Proc: EMPLOY FIRST AID TECHNIQUES RECOMMENDED BY AMERICAN RED CROSS. INHALATION: REMOVE TO FRESH AIR, OBTAIN MEDICAL ATTENTION. EYES: FLUSH WITH POTABLE WATER FOR AT LEAST 15 MINUTES. SEE MD (FP N). SKIN: FLUSH WITH COPIOUS AMOUNTS OF WATER. SEE MD (FP N).
INGESTION: CALL MD IMMEDIATELY (FP N).

Precautions for Safe Handling and Use

Steps If Matl Released/Spill: NONE SPECIFIED BY MANUFACTURER.
Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER.
Waste Disposal Method: PREVENT WASTE FROM CONTAMINATING SURROUNDING ENVIRONMENT. DISCARD PRODUCT RESIDUE. DISPOSABLE CONTAINER OR LINER IN AN ENVIRONMENTALLY ACCEPTABLE MANNER, IN FULL COMPLIANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS.

Precautions-Handling/Storing: NONE SPECIFIED BY MANUFACTURER.
Other Precautions: OTHER PRECAUTIONS FOR ADDITIONAL SAFETY INFORMATION ON WELDING AND CUTTING, SEE AMERICAN STANDARD Z49.1-1983, SAFETY IN WELDING AND CUTTING, WELDING HANDBOOK, VOL 1, SAFE PRACTICES IN WELDING AND CUTTING.

Control Measures

Respiratory Protection: MAKE SURE INHALED AIR DOES NOT CONTAIN FUME CONSTITUENTS ABOVE PERMISSIBLE EXPOSURE LEVELS. USE NIOSH/MSHA APPROVED RESPIRATOR APPROPRIATE FOR EXPOSURE OF CONCERN (FP N).
Ventilation: NONE SPECIFIED BY MANUFACTURER.
Protective Gloves: IMPERVIOUS GLOVES (FP N).
Eye Protection: ANSI APPRVD CHEM WORKERS GOGGS (FP N).
Other Protective Equipment: NONE SPECIFIED BY MANUFACTURER.
Work Hygienic Practices: NONE SPECIFIED BY MANUFACTURER.
Suppl. Safety & Health Data: FIRE FIGHT PROC: PREVENTION DURING USE OF WELDING & ALLIED PROC. HAZ DECOMP PROD: BEING USED. OTHER FACTORS INCL COATINGS ON METAL BEING WELDED (PAINT, PLATING/GALVANIZING), NUMBER OF WELDERS & VOL OF WORK AREA AS PRESENCE OF CONTAM IN ATM. WHEN ELECTRODE IS CONSUMED FUME & GAS DECOMP PRODS GENERATED ARE (ING 10)

Transportation Data

Disposal Data

Label Data

Label Required: YES
Technical Review Date: 12DEC95
Label Date: 12DEC95
Label Status: G
Common Name: E70S-2
Chronic Hazard: NO
Signal Word: CAUTION!
Acute Health Hazard-Slight: X
Contact Hazard-Slight: X
Fire Hazard-None: X
Reactivity Hazard-None: X
Special Hazard Precautions: ACUTE: ELECTRIC ARC WELDING MAY CREATE THE FOLLOWING: FUMES AND GASES CAN BE DANGEROUS TO YOUR HEALTH. ARC RAYS CAN INJURE EYES AND BURN SKIN. ELECTRIC SHOCK CAN KILL. DIZZINESS, NAUSEA, DRYNESS AND IRRITATION OF NOSE, THROAT, EYES, CHEST TIGHTNESS, FEVER, ALLERGIC REACTION, SIDEROSIS POSSIBLE, MAY AFFECT PULMONARY FUNCTION. CHRONIC: NONE SPECIFIED BY MANUFACTURER.
Protect Eye: Y
Protect Skin: Y
Protect Respiratory: Y
Label Name: HARRIS WELCO/THERMACOTE WELCO
Label Street: 1051 YORK RD
Label City: KINGS MOUNTAIN
Label State: NC
Label Zip Code: 28086
Label Country: US
Label Emergency Number: 800-424-9300 (CHEMTREC)