

BRAZING ROD

270

MATERIAL SAFETY DATA SHEET

VERSION DATE 1/3/96

WELCO 15-15FC

PRINT DATE 1/3/96

SECTION 1 PRODUCT IDENTIFICATION

COMPANY NAME WHO SENT MSDS HARRIS WELCO. DIV. OF J.W. HARRIS CO., INC.
 COMPANY ADDRESS 1051 YORK RD
 KINGS MOUNTAIN, NC 28086
 EMERGENCY PHONE NUMBER (800)-424-8300
 MSDS VERSION NUMBER 2
 TRADE NAME WELCO 15-15FC

HAZARD RATING (HMIS) NA
 HMIS DESIGNATED KEY NA

SECTION 2 HAZARDOUS COMPONENTS

MATERIAL	% BY WEIGHT	CAS NUMBER	ACGIH TLV (mg/m3)	SEC 311
COPPER	58.0 - 80.0	7440-50-8	2MG/M3	YES
IRON	25 -.50	7439-89-6	5 MG/M3 Fe2O3 Fe	NA
TIN	0.50-1.0	7440-31-5	2MG/M3	NA
ZINC	BALANCE	7440-66-6	(5)MG/M3 OXI. FUME	YES
MANGANESE	0.10-0.25	7439-96-5	NI-C-0.2	YES
SILICON	0.12-0.30	7440-21-3	10	NA
FOR 15FC ONLY : BORIC ACID	5.0	10043-35-3	5 MG/MG3 (NOC)	NA
BORAX GLASS	2.0	1303-96-4	1MG/M3	NA
COPPER	58-80.0	7440-50-8	.2 MG/M3	YES
IRON	0.25-0.50	7439-89-6	5MG/M3 Fe2O3 FE	YES
TIN	0.50-1.0	7440-31-5	2MG/M3	NA
ZINC	BALANCE	7440-66-6	5MG/M3 OXI FUME	YES
MANGANESE	0.10-0.25	7439-96-5	NI-C-0.2	YES
SILICON	0.12-0.30	7440-21-3	10	NA

SECTION 3 PHYSICAL PROPERTIES

BOILING POINT NA
 MELTING POINT 1600-1800
 VAPOR PRESSURE NA
 VAPOR DENSITY (AIR=1) NA
 SOLUBILITY IN WATER NA
 SPECIFIC GRAVITY 8.3-8.5 G/CC
 EVAPORATION RATE NA
 APPEARANCE AND ODOR BARE OR COATED BRONZE ROD. NO ODOR.

SECTION 4 FIRE AND EXPLOSION DATA

FLASH POINT NA
 EXTINGUISHING MEDIA NEVER USE WATER AS AN EXTINGUISHING AGENT AROUND MOLTEN METAL. WATER WILL REACT VIOLENTLY AROUND ANY MOLTEN METAL.
 SPECIAL PROCEDURES NA
 UNUSUAL HAZARDS NA

SECTION 5 REACTIVITY DATA

STABILITY STABLE
 CONDITIONS TO AVOID NA
 HAZARDOUS POLYMERIZATION NA
 INCOMPATIBILITY NA
 HAZARDOUS DECOMPOSITION PRODUCTS NA

SECTION 6 HEALTH HAZARD DATA

ROUTES OF ENTRY INHALATION OF FUME, GAS OR PARTICULATE & INGESTION OF PARTICLES. ABSORPTION THROUGH THE SKIN NOT LIKELY.
 HEALTH HAZARDS CHRONIC EXPOSURE TO : MANGANESE, COPPER & ZINC MAY CAUSE METAL FUME FEVER. SYMPTOMS INCLUDE: FEVER, FATIGUE, HEAD & BODY ACHE, DRYNESS OF THE THROAT, AND CHILL. CHRONIC EXPOSURES MAY AFFECT THE CENTRAL NERVOUS SYSTEM LEADING TO EMOTIONAL DISTURBANCE, GAIT, BALANCE DIFFICULTIES, & PARALYSIS. COPPER OVEREXPOSURE MAY CAUSE SKIN & HAIR DISCOLORATION.
 CARCINOGENICITY NA
 SIGNS & SYMPTOMS OF EXPOSURE USE OF THIS PRODUCTS MAY PRODUCE FUMES AND RESULTING IN EXPOSURE TO AIRBORNE METAL PARTICLES OR FUMES. SEE Z49.1 "SAFETY IN WELDING & CUTTING." WILL NOT IRRITATE THE SKIN OR EYES IN BULK FORM,
 MEDICAL CONDITIONS FROM EXPOSURE MAY CAUSE DERMATITIS DUE TO MECHANICAL IRRITATION.
 EMERGENCY & FIRST AID INGESTION - UNLIKELY, SEEK MEDICAL HELP IF LARGE QUANTITIES OF PRODUCT INGESTED. INHALATION - REMOVE TO EXPOSURE TO DUST OR FUMES, IF PRESENT. SKIN CONTACT - WASH THOROUGHLY WITH

SOAP & WATER. EYE CONTACT - FLUSH WITH WATER FOR AT LEAST 15 MINUTES. SEEK MEDICAL ATTENTION IF REQUIRED.

ADDITIONAL INFORMATION NA

SECTION 7 PRECAUTIONS FOR SAFE HANDLING AND USE

SPILL AND LEAK PROCEDURES PRODUCT IS NON-HAZARDOUS. NO SPECIAL PRE-CAUTIONS ARE REQUIRED FOR SPILLS OF BULK MATERIAL.
WASTE AND DISPOSAL METHOD SCRAP METAL CAN BE RECLAIMED FOR REUSE. FOLLOW FEDERAL, STATE, AND LOCAL REGULATIONS REGARDING DISPOSAL.
HANDLING AND STORING PRECAUTIONS..... DISCARD ANY PRODUCT RESIDUE, DISPOSABLE CONTAINER, OR LINER IN AN ENVIRONMENTALLY ACCEPTABLE MANNER. HANDLE ONLY DURING WELDING AND BRAZING - SEE SECTION 8.
OTHER PRECAUTIONS NA

SECTION 8 CONTROL MEASURES

RESPIRATORY MEASURES SHOULD BE USED IN ACCORDANCE WITH 29CFR 1910.34. IF EXPOSURE IS ABOVE THE PEL OR TLV - NIOSH APPROVED RESPIRATOR FOR FUME AND DUST.
VENTILATION..... LOCAL MECHANICAL EXHAUST RECOMMENDED DURING WELDING.
PROTECTIVE GLOVES REQUIRED DURING WELDING OR HANDLING.
EYE PROTECTION ALWAYS WEAR EYE PROTECTION DURING WELDING OR BRAZING OPERATIONS, HELMET AND/OR FACE SHIELD WITH FILTER LENS RECOMMENDED.
OTHER PROTECTIVE EQUIPMENT WELDING MAY PRODUCE FUMES & GASES HAZARDOUS TO HEALTH, AVOID BREATHING THESE FUMES& OR GASES. PROTECTIVE CLOTHING REQUIRED AGAINST BURNS, SEE LATEST NIOSH REQUIREMENTS AND WASH HANDS THOROUGHLY AFTER USE, & BEFORE EATING, DRINKING, OR SMOKING ESPECIALLY. WET MATERIAL SHOULD NEVER BE CHARGED INTO A MOLTEN BATH. NATIONAL STANDARD Z49.1.
WORK/HYGIENIC PRACTICES SEE ADDITIONAL INFORMATION SECTION 10.

SECTION 9 DISCLAIMER

THIS DATA IS BELIEVED TO BE ACCURATE. HARRIS WELCO MAKES NO WARRANTY TO AND DISCLAIMS ALL LIABILITY FROM RELIANCE.

SECTION 10 ADDITIONAL INFORMATION

NA = NOT APPLICABLE
WORK/HYGIENIC PRACTICES: FOR MAXIMUM SAFETY: BE CERTIFIED FOR, AND WEAR A RESPIRATOR AT ALL TIMES WHEN WELDING OR BRAZING.