MATERIAL SAFETY DATA SHEET

01/11/00

MSDS PROVIDED BY:

STOODY INDUSTRIAL AND WELDING SUPPLY, INC.

3316 National Ave., San Diego, Ca. 92113

Phone: (619) 234-6750

MILITARY EMERGENCY RESPONSE NUMBER 1-800-851-8061

on Date 01/05/98 (REPRODUCED SIWS)	WELCO	120		A= CH	ROMIUM	
SECTION 1		PRODUCT IDENTIFIE	CATION			
COMPANY NAME WHO PROVIDED MSDSCOMPANY ADDRESS		HARRIS WELCO. DIV. OF J.W. HARRIS CO., INC. 1051 YORK ROAD KINGS MOUNTAIN, NC 28086				
EMERGENCY PHONE NUMBERMSDS VERSION NUMBER		(800)-424-9300 2				
TRADE NAME		WELCO 120				
HAZARD RATING (HMIS) HMIS DESIGNATION KEY		-,	3 – SERIOUS HAZ	ABILITY – 1, OTHER - 2 ZARD, 2 – MODERATE HAZ ZARD	ARD,	
SECTION 2		HAZARDOUS COMPO	ONENTS			
<u>MATERIAL</u>	% BY WEIGHT	CAS NUMBER	OSHA PEL	ACGIH TLV (Mg/M3)	SEC 313	
SILICON	<6.0	7440-21-3		10 MG/M3 TOTAL	DUST	N
IRON	<1.5	7439-89-6		5 MG/M3 FE203	AS FE	Y
COPPER	< . 50	7440-50-8		2 MG/M3	YES	
MANGANESE MAGNESIUM	<1.0 <6.0	7439-96-5 7439-95-4		C 5 MG/M3 10 MG/M3 AS	YES OXIDE FUMI	FN
CHROMIUM	<.5	7440-47-3		. 5 MG/M3	YES	L 11
ZINC	<.5	7440-66-6		5 MG/M3 AS	OXIDE FUMI	E Y
TITANIUM	<.5	7440-32-6		10 MG/M3	NA	
ALUMINUM	BAL.	7429-90-5		15 MG/M3 WELD	FUME	Y
SECTION 3		PHYSICAL PROPERT	TES			
BOILING POINT		NA				
MELTING POINT		NA				
VAPOR PRESSURE		NA				
VAPOR DENSITY (AIR = 1)		NA				
SOLUBILITY IN WATERSPECIFIC GRAVITY		NA NA				
EVAPORATION RATE		NA				
APPEARANCE AND ODOR		BARE ALUMINUM.				
SECTION 4		FIRE AND EXPLOSIO	N DATA			
FLASH POINT	NA					
EXTINGUISHING MEDIA	SEE BE	LOW				
SPECIAL PROCEDURES	SEE BEI	LOW				
			CAN ICNITE CO	MDUCTIDLEC AND ELAM	MADIEC DEE	ED
UNUSUAL HAZARDS						
	AMERICAN NATIONAL STANDARD Z49.1 FOR FIRE PREVENTION DURING THE USE OF					
	WELDI	NG AND ALLIED PROCI	EDURES.			
SECTION 5	REACT	IVITY DATA				
STABILITY	STABLE					
CONDITIONS TO AVOID			DECIEIED			
		INLESS OTHERWISE SI	ECITIED.			
HAZARDOUS POLYMERIZATION	NA					
INCOMPATABILITY	NONE					
HAZARDOUS DECOMPOSITION PRODUCTS						
	THE METAL BEING WELDED. THE PROCESS, PROCEDURE AND ELECTRODES USED. OTHE					
	CONDITIONS WHICH ALSO INFLUENCE THE COMPOSITION AND QUANTITY OF FUMES AN					
	GASES TO WHICH WORKERS MAY BE EXPOSED INCLUDE: COATINGS ON METAL BEING					
	WELDE		T LEDIC OD CLI	THE NUMBER	D OF WEIDER	a .
	WELDE	D (SUCH AS PAINT, F	LATING, OR GAL	VANIZING), THE NUMBE	R OF WELDER	S A

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OF WELDER'S HEAD WITH RESPECT TO FUME PLUME, AND THE PRESENCE OF CONTAMINANTS IN ATMOSPHERE (CHLORINATED HYDROCARBON VAPORS FROM CLEANING AND DEGREASING ACTIVITIES). WHEN ROD IS CONSUMED, THE FUME AND GAS DECOMPOSITION PRODUCTS GENERATED ARE DIFFERENT IN PERCENTAGE AND FORM FROM INGREDIENTS IN SECTION 2, FUME AND GAS DECOMPOSITION PRODUCTS, AND NOT INGREDIENTS IN ELECTRODE, ARE IMPORTANT. CONCENTRATION OF GIVEN FUME OR GAS COMPONENT MAY DECREASE OR INCREASE BY MANY TIME ORIGINAL CONCENTRATION. NEW COMPOUNDS IN ELECTRODE MAY FORM. DECOMPOSITION PRODUCTS OF NORMAL OPERATION INCLUDE THOSE ORIGINATING FROM VOLATILIZATION, REACTION, OR OXIDATION OF MATERIALS IN SECTION 2. PLUS THOSE FROM BASE METAL AND COATING, ETC., AS NOTED ABOVE. REASONABLY EXPECTED FUME CONSTITUENTS OF PRODUCT COULD INCLUDE PRIMARILY OXIDES OF ALUMINUM. SECONDARY OXIDES OF SILICON, IRON, COPPER, MANGANESE, MAGNESIUM, CHROMIUM, TITANIUM, AND ZINC. GASEOUS REACTION IN PRODUCTS MAY INCLUDE CARBON MONOXIDE AND CARBON DIOXIDE, OZONE AND NITROGEN OXIDES MAY BE FORMED BY THE RADIATION FROM ARC, IN ADDITION TO SHIELDING GASES LIKE ARGON AND HELIUM WHEN EMPLOYED. ONE RECOMMENDED WAY TO DETERMINE COMPOSITION AND QUANTITY OF FUMES AND GASES IS TO TAKE AIR SAMPLE FROM INSIDE WELDER'S HELMET IF WORN OR IN BREATHING ZONE. SEE AWS F1.1 AND AWS F1.2 - 1985, AVALIABLE FROM THE AMERICAN WELDING SOCIETY. SEE AWS

	PUBLICATION: "FUMES AND GASES IN THE WELDING ENVIRONMENT".
SECTION 6	HEALTH HAZARD DATA
ROUTES OF ENTRY	NA
HEALTH HAZARDS	ELECTRIC ARC-WELDING MAY CREATE: FUMES AND GASES CAN BE DANGEROUS, ARC
	RAYS CAN INJURE EYES AND BURN SKIN, ELECTRIC SHOCK CAN KILL.
CARCINOGENICITY	THE STATE OF CALIFORNIA REQUIRES THE FOLLOWING INFORMATION: WARNING: THIS
	PRODUCT CONTAINS A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE
	CANCER.
SIGNS & SYMPTOMS OF EXPOSURE	SEE BELOW
MEDICAL CONDITIONS FROM EXPOSURE	SHORT TERM TO WELDING FUMES – DIZZINESS, NAUSEA, DRYNESS & IRRITATION OF NOSE,
	EYES, THROAT, CHEST TIGHTNESS, FEVER, ALLERGIC REACTION. LONG TERM – SIDEROSIS,
	BELIEVED TO AFFECT PULMONARY FUNCTION.
EMERGENCY & FIRST AID	NICKEL AND CHROMIUM COMPOUNDS ARE REQUIRED BY OSHA TO BE CONSIDERED
	CARCINOGENIC. REMOVE TO FRESH AIR. OBTAIN MEDICAL ATTENTION. EMPLOY FIRST
	AID TECHNIQUES RECOMMENDED BY AM. RED CROSS.
ADDITIONAL INFORMATION	NA
SECTION 7	PRECAUTIONS FOR SAFE HANDLING AND USE
SPILL AND LEAK PROCEDURES	NA
WASTE AND DISPOSAL METHOD	PREVENT WASTE FROM CONTAMINATING SURROUNDING ENVIRONMENT. DISCARD ANY
	PRODUCT RESIDUE., DISPOSABLE CONTAINER OR LINER IN ENVIRONMENTALLY
	ACCEPTABLE MANNER, IN FULL COMPLIANCE WITH FEDERAL, STATE, AND LOCAL
	PEGAN ANYONG
HANDI ING AND CTODING DDECAUTIONS	REGULATIONS.
HANDLING AND STORING PRECAUTIONS	USE EXHAUST SYSTEMS. MAKE SURE INHALED AIR DOES NOT CONTAIN FUME
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NA

OTHER PRECAUTIONS.....

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SECTION 8	CONTROL MEASURES
DEGRAD ATTORNAME A GUIDEG	VOE DECDITABLE FUNCTIONS ATTOMY OF A ID SUIDNATED DECDITATION WITH A CONTINUENT
RESPIRATORY MEASURES	
	SPACE OR LOCAL EXHAUST DOES NOT KEEP EXPOSURE BELOW RECOMMENDED EXPOSUL LIMIT.
VENTER ATTION	
VENTILATION	USE ENOUGH LOCAL VENTILATION, AND LOCAL EXHAUST AT ARC TO KEEP FUMES AND GASES FROM WORKER'S BREATHING ZONE AND GENERAL AREA. TRAIN WORKER TO KEI
	HEAD OUT OF FUMES.
PROTECTIVE GLOVES	
EYE PROTECTION	
	SHIELD OTHERS. START WITH SHADE TOO DARK THEN GO TO LIGHTER SHADE WHICH GI
	SUFFICIENT VIEW OF WELD ZONE.
OTHER PROTECTIVE EQUIPMENT	
	ELECTRICAL SHOCK. DO NOT TOUCH LIVE ELECTRICAL PARTS AND INSULATE FROM WO
	AND GROUND.
WORK/HYGIENIC PRACTICES	FOR MAXIMUM SAFETY: BE CERTIFIED FOR , AND WEAR A RESPIRATOR AT ALL TIMES
	WHEN WELDING AND OR BRAZING.
SECTION 9	DISCLAIMER
SECTION	DESCENIVIER
THIS DATA IS BELIEVED TO BE ACCURATE.	. HARRIS WEL
SECTION 10	ADDITIONAL INFORMATION
	NA = NOT APPLICABLE
	IMPORTANT – SECTION 2 COVERS THE MATERIALS FROM WHICH THIS PRODUCT IS
	MANUFACTURED. THE FUMES AND GASES PRODUCED DURING WELDING WITH NORMAL USE
	THIS PRODUCT ARE COVERED IN SECTION 5. CARCINOGENIC INFORMATION: CHROMIUM ANI
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