

MATERIAL SAFETY DATA SHEET

Date : 12/05/2011 MSDS NO.: STAINLESS ELECTRODES CAST IRON ELECTRODES	
Trade Name For : GROUP A : GEMINI E308/308H-15,16,17; E308L-15,16,17; E309L-15,16,17; E309Cb-16; E309Mo-15,16; E309MoL-16; E310-15,16; E310H-15, 16; E310Cb-16; E310Mo-16; E312-16; E316/316H -15,16,17; E316L-15,16,17; E317L-15,16,17; E318-16; E320-15,16; E320CR- 5; E330-15,16; E347-16,16,17; E410-16; E410NiMo-16; E630-16; E2209-16; E2553	
Trade Name For: GROUP B : GEMINI ENI-Cl; ENI-Fe-Cl	
PRODUCT TYPE FOR: GROUP A: STAINLESS STEEL ARC WELDING ELECTRODES GROUP B: CAST IRON ARC WELDING ELECTRODES	
Sizes : All	
SECTION 1 PRODUCTION IDENTIFICATION	
MANUFACTURE: DYNAWELD INDUSTRIAL SUPPLIES PTY LTD 123 FAIRFORD RD. PADSTOW NSW 2211 PO BOX 470, PADSTOW NSW 2211 AUSTRALIA PH 02 9772 1144 FX 02 9774 1685	PRODUCT TYPE : COVERED ARC WELDING ELECTRODE CLASSIFICATION: A5.4 CLASSIFICATION: A5.15

SECTION 2 HAZARDOUS INGREDIENTS

IMPORTANT

THIS SECTION COVERS THE HAZARDOUS INGREDIENTS FROM WHICH THIS PRODUCT IS MANUFACTURED. THE FUMES AND GASES PRODUCED DURING WELDING WITH NORMAL USE OF THIS PRODUCT ARE ALSO ADDRESSED IN SECTION 5. THE TERM "HAZARDOUS" IN THIS SECTION SHOULD BE INTERPRETED AS A TERM REQUIRED AND DEFINED IN OSHA HAZARD COMMUNICATION STANDARD (29 CFR PART 1910.1200).

HAZARDOUS INGREDIENTS	CAS NO.	% WEIGHT		OSHA PEL	ACGIH TLV
		A	B		
IRON+	7439-89-6	20-70	2-50	5 R* 10 (Oxide Fume)	3R* 5 (Oxide Fume)(A4)
#CHROMIUM	7440-47-3	10-25	---	1(Metal) 0.5(Cr II % Cr Compounds) 0.1 Cl.***(Cr VI Compounds)	0.5 (Metal)(A4) 0.5(Cr III Compounds)(A4) 0.5(Cr VI Soluble Compounds)(A1)
#NICKEL	7440-02-0	0-30	25-80	1(Metal) 1 (Soluble Compounds) 1(Insoluble Compounds)	1.5 (Metal)(A5) 0.1(Soluble Compounds)(A4) 0.2(Insoluble Compounds)(A1)
CALCIUM CARBONATE	1317-65-3	2-10	1-6	5R* 5(as CaO)	10 2(as CaO)
FLUORSPAR	7789-75-5	1-10	1-5	2.5(as F)	2.5(as F)(A4)
#MANGANESE	7439-96-5	1-10	<2	5 Cl.***(Dust) 1, 3 STEL*** (Fume)	0.2 (Dust & Fume)
SILICA+- (Amorphous Silica Fume)	14808-60-7 69012-64-2	1-10	1-10	0.1r* 0.8	0.1 R* 2 R*
TITANIUM DIOXIDE	13463-67-7	1-13	---	5R*	10(A4)
SILICON	7440-21-3	1-10	1-10	5R*	10
##ALUMINUM OXIDE	1344-28-1	0-3	---	5R*	10
MOLYBDENUM	7439-98-7	0-4	---	5R*	10
#COPPER	7440-50-8	0-4	<2	1(Dust)	1(Dust)

				0.1(Fume)	0.2(Fume)
COLUMBIUM+	7440-03-1	0-2	---	5R*	3R*
TUNGSTEN	7440-33-7	0-4	---	1, 3 STEL***	1, 3 STEL ***
SILICATE BINDERS	-----	1-10	1-10	Not Established	Not Established
ZIRCONIUM	7440-67-7	0-2	0-2	5,10 STEL***(zr&Compounds)	5,10STEL***(zr&Compounds)(A4)
MICA	12001-26-2	0-6	----	3R*	3R*
STRONTIUM CARBONATE+	1633-05-2	----	0.25	3R*	3R*
###ALUMINUM	7429-90-5	----	<5	5R* 5(Fume)	10 5(Fume)
MAGNESIUM+	7439-95-4	----	<1	5R* 5R* (Oxide Fume)	3R* 10(Oxide Fume)
#ANTIMONY TRIOXIDE	1309-64-4	----	<1	0.5(as Sb)	0.5(as Sb)(A2)
#BARIUM CARBONATE	513-77-9	----	0-15	0.5(as Ba)	0.5(as Ba)(A4)

SECTION 3 PHYSICAL/CHEMICAL CHARACTERISTICS

WELDING CONSUMABLE APPLICABLE TO THIS SHEET AS SHIPPED ARE SOLID AND NONVOLATILE AS SHIPPED.

SECTION 4 FIRE AND EXPLOSION HAZARD DATA

WELDING CONSUMABLES APPLICABLE TO THIS SHEET AS SHIPPED ARE NONREACTIVE, NONFLAMMABLE, NONEXPLOSIVE AND ESSENTIALLY NONHAZARDOUS UNTIL WELDED. WELDING ARCS AND SPARKS CAN IGNITE COMBUSTIBLES AND FLAMMABLE PRODUCTS. SEE AMERICAN NATIONAL STANDARD Z49.1 REFERENCED IN SECTION 7.

SECTION 5 REACTIVITY DATA

WELDING FUMES AND GASES CANNOT BE CLASSIFIED SIMPLE. THE COMPOSITION AND QUANTITY OF BOTH ARE DEPENDENT UPON THE METAL BEING WELDED, THE PROCESS, PROCEDURES AND ELECTRODES USED. **MOST FUME INGREDIENTS ARE PRESENT AS COMPLEX OXIDES AND COMPOUNDS AND NOT AS PURE METALS.**

OTHER CONDITIONS WHICH ALSO INFLUENCE THE COMPOSITION AND QUANTITY OF THE FUMES AND GASES TO WHICH WORKERS MAY BE EXPOSED INCLUDE: COATINGS ON THE METAL BEING WELDED (SUCE AS PAINT, PLATING OR GALVANIZING), THE NUMBER OF WELDERS AND THE VOLUME OF THE WORK AREA, THE QUALITY AND AMOUNT OF VETILATION, THE POSITION OF THE WLEDER'S HEAD WITH RESPECT TO THE FUME PLUME, AS WELL AS THE PRESENCE OF CONTAMINATS IN THE ATMOSPHERE (SUCH AS CHOLRINATED HYDROCARBON VAPORS FROM CLEANING AND DEGREASING ACTIVITIES).

WHEN THE ELECTRODE IS CONSUMED, THE FUME AND GAS DECOMPOSITION PRODUCTS FROM NORMAL USE INCLUDE THOSE ORIGINATING FROM THE VOLATILIZATION, REACTION OR OXIDATION OF THEMATERIALS SHOWN IN SECTION 2, PLUS THOSE FROM THE BASE METAL AND COATING. ETC., AS NOTED ABOVE.

REASONABLY EXPECTED CONSTITUENTS OF THE FUME WOULD INCLUDE: PRIMARILY- IRON OXIDES FOR GROUP A AND NICKEL OXIDES FOR GROUP B. SECONDARILY – COMPLEX OXIDES OF MANGANESE, CHROUMIUM, COPPER, NICKEL FOR GROUP A, CALCIUM, SILICON, AND TITANIUM FOR GROUP A AS WELL AS FLUORIDES. SOME PRODUCTS WILL ALSO CONTAIN ANTIMONY, BARIUM, MOLYUBDENUM, ALUMINUM, COLUMBIUM, MAGNESIUM, STRONTIUM, TUNGSTEN, AND/ORZIRCONIUM.

MONITOR FOR THE MATERIALS IDENTIFIED IN SECTION 2. **FUMES FROM THE USE OF THIS PRODUCTS MAY CONTAIN ANTIMONY, BARIUM, MANGANESE, CHROMIUM,NICKEL, FLUORIDES, CALCIUM OXIDES, AMORPHOUS SILICA FUME, COPPER, ANMD TUNGSTEN WHOSE EXPOSURE LIMITS ARE LOWER THAN THE 5MM/M³ PEL/TLV FOR GENERAL WELDING FUME.**

GASCOUS REACTION PRODUCTS MAY INCLUDE CARBON MONOXIDE AND CARBON DIOXIDE. OZONE AND NITROGEN OXIDES MAY BE FORMED BY THE RADIATION FROM THE ARC.

ONE RECOMMENDED WAY TO DETERMINE THE COMPOSITION AND QUANTITY OF FUMES AND GASES TO WHICH WORKERS ARE EXPOSED IS TO TAKE AN AIR SAMPLE INSIDE THE WELDER'S HELMET IF WORN OR IN THE WORKER'S BREATHING ZONE. (SEE ANSI/AWS F1.1, AVAILABLE FROM THE "AMERICAN WELDING SOCIETY", P.O. BOX 351040, MIAMI, FL 331235. ALSO, FROM AWS IS F1.3 "EVALUATING CONTAMINANTS IN THE WELDING ENVIRONMENT - A SAMPLING STRATEGY GUIDE", WHICH GIVES ADDITIONAL ADVICE ON SAMPLING.)

SECTION 6 HEALTH HAZARD DATA

EFFECTS OF OVEREXPOSURE:

ELECTRIC ARC WELDING MAY CREATE ONE OR MORE OF THE FOLLOWING HEALTH HAZARDS:

- ARC RAYS CAN INJURE EYES AND BURN SKIN.
- ELECTRIC SHOCK CAN KILL. SEE SECTION 7.
- FUMES AND GASES CAN BE DANGEROUS TO YOUR HEALTH.
- PRIMARY ROUTES OF ENTRY ARE THE RESPIRATORY SYSTEM, EYES AND/OR SKIN.

SHORT-TERM (ACUTE) OVEREXPOSURE EFFECTS:

WELDING FUMES - MAY RESULT IN DISCOMFORT SUCH AS DIZZINESS, NAUSEA OR DRYNESS OR IRRITATION OF NOSE, THROAT OR EYES.

IRON, IRON OXIDE - NONE ARE KNOWN. TREAT AS NUISANCE DUST OR FUME.

CALCIUM OXIDE - DUST OR FUMES MAY CAUSE IRRITATION OF RESPIRATORY SYSTEM, SKIN AND EYES.

FLUORIDES - FLUORIDE COMPOUNDS EVOLVED MAY CAUSE SKIN AND EYE BURNS, PULMONARY EDEMA AND BRONCHITIS.

SILICA (AMORPHOUS) - DUST AND FUMES MAY CAUSE IRRITATION OF THE RESPIRATORY SYSTEM, SKIN AND EYES.

TITANIUM DIOXIDE - IRRITATION OF RESPIRATOR SYSTEM.

MANGANESE - METAL FUME FEVER CHARACTERIZED BY CHILLS, FEVER, UPSET STOMACH, VOMITING, IRRITATION OF THE THROAT AND ACHING OF BODY. RECOVERY IS GENERALLY COMPLETE WITHIN 48 HOURS OF THE OVEREXPOSURE.

CHROMIUM - INHALATION OF FUME WITH CHROMIUM (VI) COMPOUNDS CAN CAUSE IRRITATION OF THE RESPIRATORY TRACT, LUNG DAMAGE AND ASTHMA LIKE SYMPTOMS. SWALLOWING CHROMIUM (VI) SALTS CAN CAUSE SEVERE INJURY OR DEATH. DUST ON SKIN CAN FORM ULCERS. EYES MAY BE BURNED BY CHROMIUM (VI) COMPOUNDS. ALLERGIC REACTIONS MAY OCCUR IN SOME PEOPLE.

NICKEL, NICKEL COMPOUNDS - METALLIC TASTE, NAUSEA, TIGHTNESS IN CHEST, METAL FUME FEVER, ALLERGIC REACTION.

COPPER - METAL FUME FEVER CHARACTERIZED BY METALLIC TASTE, TIGHTNESS OF CHEST AND FEVER. SYMPTOMS MAY LAST 24 TO 48 HOURS FOLLOWING OVEREXPOSURE.

MOLYBDENUM - IRRITATION OF THE EYES, NOSE AND THROAT.

ALUMINIUM, ALUMINUM OXIDE - IRRITATION OF THE RESPIRATORY SYSTEM.

COLUMBIUM - DUST OR FUMES MAY CAUSE IRRITATION OF THE RESPIRATORY SYSTEM, SKIN AND EYES DUE TO MECHANICAL EFFECTS.

TUNGSTEN - DUST MAY CAUSE IRRITATION OF THE SKIN AND EYES. INHALATION OF DUST MAY CAUSE ACUTE AIRWAYS OBSTRUCTIVE ASTHMA WHICH IS REVERSIBLE FOLLOWING OVEREXPOSURE. SYMPTOMS ARE TIGHTENING CHEST AND PRODUCTIVE COUGH.

ZIRCONIUM - MAY CAUSE IRRITATION OF THE EYES, NOSE AND THROAT DUE TO MECHANICAL EFFECTS.

STRONTIUM COMPOUNDS - STRONTIUM SALTS ARE GENERALLY NON-TOXIC AND ARE NORMALLY PRESENT IN THE HUMAN BODY. IN LARGE ORAL DOSES, THEY MAY CAUSE GASTROINTESTINAL DISORDERS, VOMITING AND DIARRHEA.

MAGNESIUM, MAGNESIUM OXIDE - OVEREXPOSURE TO THE OXIDE MAY CAUSE METAL FUME FEVER CHARACTERIZED BY METALLIC TASTE, TIGHTNESS OF CHEST AND FEVER. SYMPTOMS MAY LAST 24 TO 48 HOURS FOLLOWING EXPOSURE.

ANTIMONY COMPOUNDS - IRRITATION OF NOSE, THROAT, EYES AND SKIN.

BARIUM COMPOUNDS - ACHING EYES, RHINITIS, FRONTAL HEADACHE, WHEEZING, LARYNGEAL SPASMS, SALIVATION OR ANOREXIA.

LONG-TERM (CHRONIC) OVEREXPOSURE EFFECTS:

WELDING FUMES – EXCESS LEVELS MAY CAUSE BRONCHIAL ASTHMA, LUNG FIBROSIS, PNEUMOCONIOSIS OR “SIDEROSIS”

IRON, IRON OXIDE FUMES – CAN CAUSE SIDEROSIS (DEPOSITS OF IRON IN LUNGS) WHICH SOME RESEARCHERS BELIEVE MAY AFFECT PULMONARY FUNCTION. LUNGS WILL CLEAR IN TIME WHEN EXPOSURE TO IRON AND ITS COMPOUNDS CEASES. IRON AND MAGNETITE (Fe_3O_4) ARE NOT REGARDED AS FIBROGENIC MATERIALS.

CALCIUM OXIDE – PROLONGED OVEREXPOSURE MAY CAUSE ULCERATION OF THE SKIN AND PERFORATION OF THE NASAL SEPTUM, DERMATITIS AND PNEUMONIA.

FLUORIDES – SERIOUS BONE EROSION (OSTEOPOROSIS) AND MOTTLING OF TEETH.

SILICA (AMORPHOUS) – RESEARCH INDICATES THAT SILICA IS PRESENT IN WELDING FUME IN THE AMORPHOUS FORM. LONG TERM OVEREXPOSURE MAY CAUSE PNEUMOCONIOSIS. NONCRYSTALLINE FORMS OF SILICA (AMORPHOUS SILICA) ARE CONSIDERED TO HAVE LITTLE FIBROTIC POTENTIAL.

TITANIUM DIOXIDE – PULMONARY IRRITATION AND SLIGHT FIBROSIS.

MANGANESE – LONG-TERM OVEREXPOSURE TO MANGANESE COMPOUNDS MAY AFFECT THE CENTRAL NERVOUS SYSTEM. SYMPTOMS MAY BE SIMILAR TO PARKINSON'S DISEASE AND CAN INCLUDE SLOWNESS, CHANGES IN HANDWRITING, GAIT IMPAIRMENT, MUSCLE SPASMS AND CRAMPS AND LESS COMMONLY, TREMOR AND BEHAVIORAL CHANGES. EMPLOYEES WHO ARE OVEREXPOSED TO MANGANESE COMPOUNDS SHOULD BE SEEN BY A PHYSICIAN FOR EARLY DETECTION OF NEUROLOGIC PROBLEMS.

CHROMIUM – ULCERATION AND PERFORATION OF NASAL SEPTUM. RESPIRATORY IRRITATION MAY OCCUR WITH SYMPTOMS RESEMBLING ASTHMA. STUDIES HAVE SHOWN THAT CHROMATE PRODUCTION WORKERS EXPOSED TO HEXAVALENT CHROMIUM COMPOUNDS HAVE AN EXCESS OF LUNG CANCERS. CHROMIUM (VI) COMPOUNDS ARE MORE READILY ABSORBED THROUGH THE SKIN THAN CHROMIUM (III) COMPOUNDS. GOOD PRACTICE REQUIRES THE REDUCTION OF EMPLOYEE EXPOSURE TO CHROMIUM (III) AND (VI) COMPOUNDS.

NICKEL, NICKEL COMPOUNDS – LUNG FIBROSIS OR PNEUMOCONIOSIS. STUDIES OF NICKEL REFINERY WORKERS INDICATED A HIGHER INCIDENCE OF LUNG AND NASAL CANCERS.

COPPER – COPPER POISONING HAS BEEN REPORTED IN THE LITERATURE FROM EXPOSURE TO HIGH LEVELS OF COPPER. LIVER DAMAGE CAN OCCUR DUE TO COPPER ACCUMULATION IN THE LIVER CHARACTERIZED BY CELL DESTRUCTION AND CIRRHOSIS. HIGH LEVELS OF COPPER MAY CAUSE ANEMIA AND JAUNDICE. HIGH LEVELS OF COPPER MAY CAUSE CENTRAL NERVOUS SYSTEM DAMAGE CHARACTERIZED BY NERVE FIBER SEPARATION AND CEREBRAL DEGENERATION.

MOLYBDENUM – PROLONGED OVEREXPOSURE MAY RESULT IN LOSS OF APPETITE, WEIGHT LOSS, LOSS OF MUSCLE COORDINATION, DIFFICULTY IN BREATHING AND ANEMIA.

ALUMINUM, ALUMINUM OXIDE – PULMONARY FIBROSIS AND EMPHYSEMA.

COLUMBIUM – NO ADVERSE LONG TERM HEALTH EFFECTS HAVE BEEN REPORTED IN THE LITERATURE.

TUNGSTEN – LONG TERM OVEREXPOSURE MAY CAUSE PULMONARY FIBROSIS CHARACTERIZED BY A RAPID ONSET OF COUGH, SPUTUM AND DYSPNEA ON EXERTION.

ZIRCONIUM – MAY CAUSE PULMONARY FIBROSIS AND PNEUMOCONIOSIS.

STRONTIUM COMPOUNDS – STRONTIUM AT HIGH DOSES IS KNOWN TO CONCENTRATE IN BONE. MAJOR SIGNS OF CHRONIC TOXICITY, WHICH INVOLVE THE SKELETON, HAVE BEEN LABELED AS “STRONTIUM RICKETS”

MAGNESIUM, MAGNESIUM OXIDE – NO ADVERSE LONG TERM HEALTH EFFECTS HAVE BEEN REPORTED IN THE LITERATURE.

ANTIMONY COMPOUNDS – METAL FUME FEVER, DERMATITIS, KERATITIS, CONJUNCTIVITIS AND ULCERATION AND PERFORATION OF THE NASAL SEPTUM AVOID CONDITIONS IN WHICH FRESH HYDROGEN WILL REACT WITH ANTIMONY TO FORM STIBINE WHICH IS EXTREMELY TOXIC. IARC CONSIDERS ANTIMONY TRIOXIDE AS POSSIBLE CARCINOGENIC TO HUMANS (GROUP 2B)

BIARIUM COMPOUNDS – LONG TERM OVEREXPOSURE TO SOLUBLE BIARIUM COMPOUNDS MAY CAUSE NERVOUS DISORDERS AND MAY HAVE DELETERIOUS EFFECTS ON THE HEART, CIRCULATORY SYSTEM AND MUSCULATURE.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

PERSONS WITH PRE-EXISTING IMPAIRED LUNG FUNCTIONS (ASTHMA-LIKE CONDITIONS).

EMERGENCY AND FIRST AID PROCEDURES:

CALL FOR MEDICAL AID. EMPLOY FIRST AID TECHNIQUES RECOMMENDED BY THE AMERICAN RED CROSS.

EYES & SKIN: IF IRRITATION OR FLASH BURNS DEVELOP AFTER EXPOSURE, CONSULT A PHYSICIAN.

CARCINOGENICITY:

CHROMIUM VI AND NICKEL COMPOUNDS MUST BE CONSIDERED CARCINOGENS ACCORDING TO OSHA (29 CFR 1910.1200). CHROMIUM VI COMPOUNDS ARE CLASSIFIED AS IARC GROUP 1 AND NTP GROUP 1 CARCINOGENS. NICKEL COMPOUNDS ARE CLASSIFIED AS IARC GROUP 1 AND NTP GROUP 2 CARCINOGENS.

WELDING FUMES MUST BE CONSIDERED AS POSSIBLE CARCINOGENS UNDER OSHA (29 CFR 1910.1200).

CALIFORNIA PROPOSITION 65:

WARNING: THESE PRODUCTS CONTAIN OR PRODUCE CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS (OR OTHER REPRODUCTIVE HARM). (CALIFORNIA HEALTH & SAFETY CODE SECTION 25249.5 ET SEQ.)

SECTION 7 PRECAUTIONS FOR SAFE HANDLING & USE/APPLICABLE CONTROL MEASURES

READ AND UNDERSTAND THE MANUFACTURER'S INSTRUCTIONS AND THE PRECAUTIONARY LABEL ON THE PRODUCT. SEE AMERICAN NATIONAL STANDARDS Z49.1: SAFETY IN WELDING AND CUTTING PUBLISHED BY THE AMERICAN WELDING SOCIETY, P.O. BOX 351040, MIAMI, FL 33135 AND OSHA PUBLICATION 2206 (29 CFR 1910), U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, DC 20402 FOR MORE DETAIL ON ANY OF THE FOLLOWING.

VENTILATION: USE ENOUGH VENTILATION, LOCAL EXHAUST AT THE ARC OR BOTH TO KEEP THE FUMES AND GASES BELOW PEL/TLVS IN THE WORKER'S BREATHING ZONE AND THE GENERAL AREA. TRAIN THE WELDER TO KEEP HIS HEAD OUT OF THE FUMES.

RESPIRATORY PROTECTION: USE NIOSH APPROVED OR EQUIVALENT FUME RESPIRATOR OR AIR SUPPLIED RESPIRATOR WHEN WELDING IN CONFINED SPACE OR WHERE LOCAL EXHAUST OR VENTILATION DOES NOT KEEP EXPOSURE BELOW PEL/TLVS.

EYE PROTECTION: WEAR HELMET OR USE FACE SHIELD WITH FILTER LENS. AS A RULE OF THUMB BEGIN WITH SHADE NUMBER 14. ADJUST IF NEEDED BY SELECTING THE NEXT LIGHTER AND/OR DARKER SHADE NUMBER. PROVIDE PROTECTIVE SCREENS AND FLASH GOGGLES, IF NECESSARY, TO SHIELD OTHER.

PROTECTIVE CLOTHING: WEAR HAND, HEAD AND BODY PROTECTION WHICH HELP TO PREVENT INJURY FROM RADIATION, SPARKS AND ELECTRICAL SHOCK. SEE ANSI A49.1. AT A MINIMUM THIS INCLUDES WELDER'S GLOVES AND A PROTECTIVE FACE SHIELD, AND MAY INCLUDE ARM PROTECTORS, APRONS, HATS, SHOULDER PROTECTION AS WELL AS DARK NONSYNTHETIC CLOTHING. TRAIN THE WELDER NOT TO TOUCH LIVE ELECTRICAL PARTS AND TO INSULATE HIMSELF FROM WORK AND GROUND.

PROCEDURE FOR CLEANUP OF SPILLS OR LEAKS: NOT APPLICABLE

WASTE DISPOSAL: 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 AND LOCAL REGULATIONS.

SPECIAL PRECAUTIONS (IMPORTANT): MAINTAIN EXPOSURE BELOW THE PEL/TLVS. USE INDUSTRIAL HYGIENE MONITORING TO ENSURE THAT YOUR USE OF THIS MATERIAL DOES NOT CREATE EXPOSURES WHICH EXCEED PEL/TLVS. ALWAYS USE EXHAUST VENTILATION. REFER TO THE FOLLOWING SOURCES FOR IMPORTANT ADDITIONAL INFORMATION: ANSI Z49.1 FROM THE AMERICAN WELDING SOCIETY, P.O. BOX 351040, MIAMI, FL 33135 AND OSHA (29 CFR 1910) FROM THE U.S. DEPARTMENT OF LABOR, WASHINGTON, DC 20210.