

***** SECTION I *****

FORMULA DATE: 840302
MANUFACTURER:

DATE: 09/08/87

E.I. DUPONT DE NEMOURS & CO (INC)
FINISHES & FABRICATED PRODUCTS DEPT. 1007-T Market St.
WILMINGTON, DELAWARE 19898

TELEPHONE:
PRODUCT INFORMATION (800) 441-7515
MEDICAL EMERGENCY (800) 441-3637
TRANSPORTATION EMERGENCY (800) 424-9300 (CHEMTREC)

IDENTITY: "CORLAR" EPOXY D.B. ENAMEL WHITE

SALES CODE: 823Y67632

DOT NAME: FLAMMABLE LIQUID

HEALTH: 2 FLAMMABILITY: 3 REACTIVITY: 0

***** SECTION II - INGREDIENTS *****

INGRED#	CAS NO.	INGREDIENT
001	13463-67-7	TITANIUM DIOXIDE
002	7727-43-7	BARIUM SULFATE
003	14807-96-6	HYDROUS MAGNESIUM SILICATE
004	25036-25-3	BISPHENOL A/EPICHLOROHYDRIN POLYMER
005	71-36-3	N-BUTYL ALCOHOL
006	108-88-3	TOLUENE
007	67-63-0	ISOPROPYL ALCOHOL
008	141-78-6	ETHYL ACETATE
009	108-65-6	PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE

INGRED#	VAPOR PRESSURE MM HG	EXPOSURE LIMITS			
001	NOT APP	ACGIH	10.0 MG/M3		
		OSHA	15.0 MG/M3		
002	NOT APP	ACGIH	10.0 MG/M3		
		OSHA	NONE		
003	NOT APP	ACGIH	2.0 MG/M3		RESPIRABLE NOASBESTOS
		OSHA	5.0 MG/M3		NOASBESTOS
		DUPONT	2.0 MG/M3		RESPIRABLE NOASBESTOS
004	NONE	ACGIH	NONE		
		OSHA	NONE		
005	5.50	ACGIH	50.0 PPM	SKIN	CEILING
	25 DEG (C)	OSHA	100.0 PPM		
		DUPONT	25.0 PPM		
		DUPONT	50.0 PPM		15 MIN TWA

HMS*

H	HEALTH	3
F	FLAMMABILITY	4
R	REACTIVITY	0
PERSONAL PROTECTION		J

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***** SECTION II CONTINUED *****

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006	36.70	ACGIH	100.0 PPM		
	25 DEG (C)	OSHA	200.0 PPM		
		ACGIH	150.0 PPM		15 MIN(STEL)
		OSHA	300.0 PPM	CEILING	
		OSHA	500.0 PPM		MAX (10MIN)
007	33.00	ACGIH	400.0 PPM		
	25 DEG (C)	OSHA	400.0 PPM		
		ACGIH	500.0 PPM		15 MIN(STEL)
008	76.00	ACGIH	400.0 PPM		
	25 DEG (C)	OSHA	400.0 PPM		
009	3.80	ACGIH	NONE		
	25 DEG (C)	OSHA	NONE		

***** SECTION III - PHYSICAL DATA *****

EVAPORATION RATE SLOWER THAN ETHER	VAPOR DENSITY HEAVIER THAN AIR	SOLUBILITY OF SOLVENT SYSTEM IN WATER APPRECIABLE
PERCENT VOLATILE BY VOLUME 52.0	APPROX. BOILING RANGE 76-190 DEG (C)	WEIGHT PER GALLON 11.92
PERCENT VOLATILE BY WEIGHT 31.9	PERCENT SOLIDS 68.0	V.O.C. THEORETICAL 3.82

***** SECTION IV - FIRE & EXPLOSION DATA *****

FLASH POINT (METHOD) BETWEEN 20 - 73 F (CC)	APPROX. FLAMMABLE LIMITS LEL .9 % UEL .0 %
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EXTINGUISHING MEDIA: FOAM , CARBON DIOXIDE, DRY CHEMICAL
SPECIAL FIRE FIGHTING PROCEDURES: FULL PROTECTIVE EQUIP-
MENT, INCLUDING SELF-CONTAINED BREATHING APPARATUS, IS
RECOMMENDED. WATER FROM FOG NOZZLES MAY USED TO PREVENT
PRESSURE BUILD-UP.

UNUSUAL FIRE & EXPLOSION HAZARDS: WHEN HEATED ABOVE THE
FLASHPOINT, EMITS FLAMMABLE VAPORS WHICH, WHEN MIXED WITH
AIR, CAN BURN OR BE EXPLOSIVE. FINE MISTS OR SPRAYS MAY BE
FLAMMABLE AT TEMPERATURES BELOW THE FLASH POINT.

***** SECTION V - HEALTH HAZARD DATA *****

ROUTE OF ENTRY	SYMPTOMS/EFFECTS AND FIRST AID
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INHALATION: MAY CAUSE NOSE AND THROAT IRRITATION . MAY CAUSE
NERVOUS SYSTEM DEPRESSION CHARACTERIZED BY THE FOLLOWING
PROGRESSIVE STEPS: HEADACHE, DIZZINESS, NAUSEA, STAGGERING

***** SECTION V CONTINUED *****

GAIT, CONFUSION, UNCONSCIOUSNESS.

REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE.

SKIN OR EYE CONTACT: MAY CAUSE IRRITATION OR BURNING OF THE EYES. REPEATED OR PROLONGED LIQUID CONTACT MAY CAUSE SKIN IRRITATION WITH DISCOMFORT AND DERMATITIS.

OTHER POTENTIAL HAZARDS INCLUDE:

TITANIUM DIOXIDE

IN A LIFETIME INHALATION TEST, LUNG CANCERS WERE FOUND IN SOME RATS EXPOSED TO 250 MG/M3 RESPIRABLE TITANIUM DUST. ANALYSIS OF THE TITANIUM DIOXIDE CONCENTRATIONS IN THE RAT'S LUNGS SHOWED THAT THE LUNG CLEARANCE MECHANISM WAS OVERWHELMED AND THAT THE RESULTS AT THE MASSIVE 250 MG/M3 LEVEL ARE NOT RELEVANT TO THE WORKPLACE.

HYDROUS MAGNESIUM SILICATE

TALC

REPEATED AND PROLONGED OVEREXPOSURE TO TALC MAY LEAD TO TYPICAL X RAY CHANGES AND CHRONIC LUNG DISEASE.

BISPHENOL A/EPICHLOROHYDRIN POLYMER

REPEATED EXPOSURE MAY CAUSE ALLERGIC SKIN RASH, ITCHING, SWELLING.
HAS SHOWN MUTAGENIC ACTIVITY IN LABORATORY CELL CULTURE TESTS.

N-BUTYL ALCOHOL

LIQUID SPLASHES IN THE EYE MAY RESULT IN CHEMICAL BURNS.
MAY CAUSE ABNORMAL LIVER FUNCTION.
MAY CAUSE ABNORMAL KIDNEY FUNCTION.

TOLUENE

RECURRENT OVEREXPOSURE MAY RESULT IN LIVER AND KIDNEY INJURY.
HIGH AIRBORNE LEVELS HAVE PRODUCED IRREGULAR HEART BEATS IN ANIMALS AND OCCASIONAL PALPITATIONS IN HUMANS.
RATS EXPOSED TO VERY HIGH AIRBORNE LEVELS HAVE EXHIBITED HIGH FREQUENCY HEARING DEFICITS. THE SIGNIFICANCE OF THIS TO MAN IS UNKNOWN.

ISOPROPYL ALCOHOL

INGESTION STUDIES ON LABORATORY ANIMALS SHOWED THAT VERY HIGH ORAL DOSES CAUSED INCREASED LIVER AND KIDNEY WEIGHTS.
HIGH ORAL DOSES HAVE CAUSED ANEMIA IN LABORATORY ANIMALS.

ETHYL ACETATE

PROLONGED AND REPEATED HIGH EXPOSURES OF LABORATORY ANIMALS RESULTED IN SECONDARY ANEMIA WITH AND INCREASE IN WHITE BLOOD CELLS; FATTY DEGENERATION, CLOUDY SWELLING AND AN EXCESS OF BLOOD IN VARIOUS ORGANS.

***** SECTION V CONTINUED *****

ENE GLYCOL MONOMETHYL ETHER ACETATE

MAY CAUSE MODERATE EYE BURNING

RECURRENT OVEREXPOSURE MAY RESULT IN LIVER AND KIDNEY INJURY.

FIRST AID:

INHALATION: IF AFFECTED BY INHALATION OF VAPOR OR SPRAY MIST, REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION, PREFERABLY MOUTH-TO-MOUTH. IF BREATHING DIFFICULTY PERSISTS, OR OCCURS LATER, CONSULT A PHYSICIAN.

SKIN OR EYE: IN CASE OF CONTACT, IMMEDIATELY FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES; CALL A PHYSICIAN. IN CASE OF SKIN CONTACT, WASH WITH SOAP AND WATER. IF IRRITATION OCCURS, CONTACT A PHYSICIAN.

INGESTION: GASTRO-INTESTINAL DISTRESS.

IN THE UNLIKELY EVENT OF INGESTION, CALL A PHYSICIAN IMMEDIATELY AND HAVE NAMES OF INGREDIENTS AVAILABLE.

***** SECTION VI - REACTIVITY DATA *****

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TABLE

INCOMPATIBILITY (MATERIALS TO AVOID): NONE REASONABLY FORESEEABLE.

HAZARDOUS DECOMPOSITION PRODUCTS: CO, CO₂, SMOKE, OXIDES OF HEAVY METALS REPORTED IN SECTION V.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR.

***** SECTION VII - SPILL OR LEAK PROCEDURES *****

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: VENTILATE AREA. REMOVE SOURCES OF IGNITION. PREVENT SKIN CONTACT AND BREATHING OF VAPOR. CONFINE AND REMOVE WITH INERT ABSORBENT.

WASTE DISPOSAL METHOD: DO NOT ALLOW MATERIAL TO CONTAMINATE GROUND WATER SYSTEMS. INCINERATE ABSORBED MATERIAL IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REQUIREMENTS. DO NOT INCINERATE IN CLOSED CONTAINERS.

***** SECTION VIII - SPECIAL PROTECTION INFORMATION ****

RESPIRATORY: DO NOT BREATHE VAPORS OR MISTS. WEAR A PROPERLY FITTED VAPOR/PARTICULATE RESPIRATOR APPROVED BY NIOSH/MSHA (TC-23C) FOR USE WITH PAINTS DURING APPLICATION AND UNTIL ALL VAPORS AND SPRAY MISTS ARE EXHAUSTED. FOLLOW THE RESPIRATOR MANUFACTURER'S DIRECTIONS FOR RESPIRATOR USE

***** SECTION VIII CONTINUED *****

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VENTILATION: PROVIDE SUFFICIENT VENTILATION IN VOLUME AND PATTERN TO KEEP CONTAMINANTS BELOW APPLICABLE OSHA REQUIREMENTS AND OTHER SUGGESTED EXPOSURE LIMITS.

PROTECTIVE CLOTHING: NEOPRENE GLOVES AND COVERALLS ARE RECOMMENDED.

EYE PROTECTION: GOGGLES ARE PREFERRED TO PREVENT EYE IRRITATION. IF SAFETY GLASSES ARE SUBSTITUTED, INCLUDE SPLASH GUARD OR SIDE SHIELDS.

PROTECTIVE CREAMS: DO NOT USE FOR PROTECTION. MAY BE USED FOR EASE OF CLEAN UP.

***** SECTION IX - SPECIAL PRECAUTIONS *****

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: OBSERVE LABEL PRECAUTIONS. KEEP AWAY FROM HEAT, SPARKS AND FLAME. CLOSE CONTAINER AFTER EACH USE. GROUND CONTAINERS WHEN POURING. WASH THOROUGHLY AFTER HANDLING AND BEFORE EATING OR SMOKING. DO NOT STORE ABOVE 120 F.

OTHER PRECAUTIONS: DO NOT SAND, FLAME CUT, BRAZE OR WELD DRY COATING WITHOUT A NIOSH/MSHA APPROVED RESPIRATOR OR APPROPRIATE VENTILATION.

***** SECTION X - NOTES *****

NOTICE FROM DUPONT

THE DATA IN THIS MATERIAL SAFETY DATA SHEET RELATE ONLY TO THE SPECIFIC MATERIAL DESIGNATED HEREIN AND DO NOT RELATE TO USE IN COMBINATION WITH ANY OTHER MATERIAL OR ANY PROCESS.

PRODUCT MANAGER