

1FID: 00215383  
VER DATE: 1995-01-03

C H E M I S T R I  
MATERIAL SAFETY DATA SHEET

DATE: 10/22/02  
TIME: 19:01:41  
PAGE: 0001

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SECTION 01: CHEMICAL PRODUCT & COMPANY ID  
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PRODUCT PRIMARY NAME: PRISM 410 BLACK TOUGHENED INST ADH  
ALL SYNONYMS : BLACK TOUGHENED ADHESIVE  
COMBUSTIBLE CYANOACRYLATE  
CUA: 76-A63  
DCS-690  
GA 72  
HM 6508  
H1559  
IH-88-054  
LO-883  
LOCTITE 410  
LOCTITE 410 PRISM BLACK  
LOCTITE 41004  
MG6549  
NMA 21  
PRISM SERIES 410 BLACK TOUGHENED INSTANT ADHESIVE  
PRISM 410  
PRISM 410 BLACK TOUGHENED INST ADH  
PRISM 410 BLACK TOUGHENED INST ADH 41061  
PRISM 410 BLACK TOUGHENED INSTANT ADHESIVE  
P133.7  
SA 3136  
0011-0830  
0011-0891  
0205632  
12346067  
1868  
236946 (OLD FID)  
262644 (OLD FID)  
3500 CD  
3635718  
3635764  
3635765  
41004  
41045  
41061  
41088  
42017-HMC1367  
55953HM73  
58001HM73  
90PS0161  
9982175

SAFE USE CATEGORY AND DESCRIPTION: 05 -ADHESIVES - SOLVENT-BASED  
POLYURETHANES,

LAST UPDATED DATE: 2002-01-27

MANUFACTURER'S ID (MID): 000522786  
MANUFACTURER'S NAME: LOCTITE CORP

MANUFACTURER'S EMERGENCY PHONE NUMBER/TEXT: US 860-571-5100

MANUFACTURER'S MAILING ADDRESS:

1001 TROUT BROOK CROSSING  
ALSO SEE GMBA #502982 (PERMATEX)  
ROCKY HILL CT 06067-3910  
US

SECTION 1 - OTHER INFORMATION: PREPARED BY: STEPHEN REPETTO. TITLE:  
RESEARCH CHEMIST, ENVIRONMENTAL HEALTH & SAFETY.

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SECTION 02: COMPOSITION & INGREDIENT INFO  
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CAS#	FORMULATION	W/V	CHEMICAL NAME
000085449	R 0.1000/ 1.0000%	W	PHTHALIC ANHYDRIDE
000123319	R 1.0000/ 1.5000%	W	HYDROQUINONE
001333864	R 1.0000/ 3.0000%	W	CARBON BLACK
007085850	R 85.0000/ 90.0000%	W	2-Propenoic acid, 2-cyano-, ethyl ester
054545505	R 5.0000/ 10.0000%	W	2-Butenedioic acid (Z)-, monoethyl ester, polymer with ethene and methyl 2-propenoate
112945525	R 3.0000/ 5.0000%	W	SILICA, AMORPHOUS FUMED

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SECTION 03: HAZARDS IDENTIFICATION  
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PRIMARY ENTRY ROUTE INDICATORS:

SKIN PRIMARY ENTRY ROUTE INDICATOR = Y  
EYE PRIMARY ENTRY ROUTE INDICATOR = Y  
INHALATION PRIMARY ENTRY ROUTE INDICATOR = Y  
INGESTION PRIMARY ENTRY ROUTE INDICATOR = Y  
PRIMARY ROUTES OF ENTRY TEXT: NONE KNOWN.

EFFECTS OF OVEREXPOSURE - EYE: TOXICITY: LIQUID IS AN EYE IRRITANT.  
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: NONE KNOWN.

ADDITIONAL HEALTH HAZARD DATA: SIGNS AND SYMPTOMS OF EXPOSURE: VAPOR IS IRRITATING TO EYES AND MUCOUS MEMBRANES ABOVE TLV. EXPOSURE TO VAPORS ABOVE THE ESTABLISHED LIMITS MAY CAUSE SYMPTOMS OF NON-ALLERGIC ASTHMA. ADDITIONAL HEALTH EFFECT INFORMATION ON INDIVIDUAL INGREDIENTS IS AVAILABLE AT THE MSDS PROCESSING CENTER.

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SECTION 04: FIRST AID MEASURES  
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EMERGENCY FIRST AID PROCEDURES - GENERAL: INFORMATION FOR FIRST AID AND CASUALTY ON TREATMENT FOR ADHESION OF HUMAN SKIN TO ITSELF IF CAUSED BY CYANOACRYLATE ADHESIVES: CYANOACRYLATE ADHESIVE IS A VERY FAST SETTING AND STRONG ADHESIVE. IT BONDS HUMAN TISSUE INCLUDING SKIN IN SECONDS. EXPERIENCE HAS SHOWN THAT ACCIDENTS DUE TO CYANOACRYLATES ARE HANDLED BEST BY PASSIVE, NONSURGICAL FIRST AID. TREATMENT OF SPECIFIC TYPES OF ACCIDENTS ARE GIVEN. MOUTH: IF LIPS ARE ACCIDENTALLY STUCK TOGETHER, APPLY LOTS OF WARM WATER TO THE LIPS AND ENCOURAGE MAXIMUM WETTING AND PRESSURE FROM SALIVA INSIDE THE MOUTH. PEEL OR ROLL LIPS APART. DO NOT TRY TO PULL THE LIPS WITH DIRECT OPPOSING ACTION. IT IS ALMOST IMPOSSIBLE TO SWALLOW CYANOACRYLATE. THE ADHESIVE SOLIDIFIES AND ADHERES IN THE MOUTH. SALIVA WILL LIFT THE ADHESIVE IN ONE HALF TO TWO

DAYS. IN CASE A LUMP FORMS IN THE MOUTH, POSITION THE PATIENT TO PREVENT INGESTION OF THE LUMP WHEN IT DETACHES. BURNS: CYANOACRYLATES GIVE OFF HEAT ON SOLIDIFICATION. IN RARE CASES A LARGE DROP WILL INCREASE IN TEMPERATURE ENOUGH TO CAUSE A BURN. BURNS SHOULD BE TREATED NORMALLY AFTER THE LUMP OF CYANOACRYLATE IS RELEASED FROM THE TISSUE AS DESCRIBED. SURGERY: IT SHOULD NEVER BE NECESSARY TO USE SUCH A DRASTIC METHOD TO SEPARATE ACCIDENTALLY BONDED SKIN.

EMERGENCY FIRST AID PROCEDURES - SKIN: SOAK IN WARM WATER. REMOVE EXCESS ADHESIVE. SOAK IN WARM, SOAPY WATER. THE ADHESIVE WILL COME LOOSE FROM THE SKIN IN SEVERAL HOURS. CURED ADHESIVE DOES NOT PRESENT A HEALTH HAZARD EVEN WHEN BONDED TO THE SKIN. SKIN ADHESION: FIRST IMMERSER THE BONDED SURFACES IN WARM, SOAPY WATER. PEEL OR ROLL THE SURFACES APART WITH THE AID OF A BLUNT EDGE, E.G. A SPATULA OR A TEASPOON HANDLE; THEN REMOVE ADHESIVE FROM THE SKIN WITH SOAP AND WATER. DO NOT TRY TO PULL SURFACES APART WITH A DIRECT OPPOSING ACTION.

EMERGENCY FIRST AID PROCEDURES - EYES: FLUSH WITH WATER. EYELID TO EYELID OR EYEBALL ADHESION: IN THE EVENT THAT EYELIDS ARE STUCK TOGETHER OR BONDED TO THE EYEBALL, WASH THOROUGHLY WITH WARM WATER AND APPLY A GAUZE PATCH. THE EYE WILL OPEN WITHOUT FURTHER ACTION, TYPICALLY IN 1-4 DAYS. THERE WILL BE NO RESIDUAL DAMAGE. DO NOT TRY TO OPEN THE EYES BY MANIPULATION. ADHESIVE ON THE EYEBALL: CYANOACRYLATE INTRODUCED INTO THE EYES WILL ATTACH ITSELF TO THE EYE PROTEIN AND WILL DISASSOCIATE FROM IT OVER INTERMITTENT PERIODS, GENERALLY COVERING SEVERAL HOURS. THIS WILL CAUSE PERIODS OF WEEPING UNTIL CLEARANCE IS ACHIEVED. DURING THE PERIOD OF CONTAMINATION, DOUBLE VISION MAY BE EXPERIENCED TOGETHER WITH A LACHRYMATORY EFFECT, AND IT IS IMPORTANT TO UNDERSTAND THE CAUSE AND REALIZE THAT DISASSOCIATION WILL NORMALLY OCCUR WITHIN A MATTER OF HOURS, EVEN WITH GROSS CONTAMINATION.

EMERGENCY FIRST AID PROCEDURES - INHALATION: REMOVE TO FRESH AIR. IF SYMPTOMS PERSIST, OBTAIN MEDICAL ATTENTION.

EMERGENCY FIRST AID PROCEDURES - INGESTION: INGESTION IS NOT LIKELY.

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SECTION 05: FIRE-FIGHTING MEASURES

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SPECIAL FIRE FIGHTING PROCEDURES: NOT AVAILABLE. RECOMMENDED EXTINGUISHING AGENTS: CARBON DIOXIDE, FOAM, DRY CHEMICAL.

UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE.

HMIS CODES:

HMIS REACTIVITY CODE =	1
HMIS HEALTH CODE =	2
HMIS FLAMMABILITY CODE =	2
NFPA CODES:	
NFPA FLAMMABILITY CODE =	2
NFPA HEALTH CODE =	2
NFPA REACTIVITY CODE =	1

FLASH POINT TEMPS: R 150.00F TO 200.00F  
FLASH POINT METHOD: TCC  
FLASH POINT METHOD TEXT: TAG CLOSED CUP.

SECTION 5 - OTHER INFORMATION: HAZARDOUS PRODUCTS FORMED BY FIRE OR THERMAL DECOMP: IRRITATING ORGANIC VAPORS. EXPLOSIVE LIMITS: (% BY VOLUME IN AIR) LOWER: 1.7% (85-44-9); (% BY VOLUME IN AIR) UPPER: 10.5% (85-44-9). ESTIMATED NFPA: SPECIFIC HAZARD: DOES NOT APPLY. ESTIMATED HMIS: PERSONAL PROTECTION: SEE SECTION 8.

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SECTION 06: ACCIDENTAL RELEASE MEASURES  
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SPILL OR LEAK PROCEDURES: FLOOD WITH WATER TO POLYMERIZE. SOAK UP WITH AN INERT ABSORBENT. STORE IN A CLOSED CONTAINER UNTIL DISPOSAL.

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SECTION 07: HANDLING AND STORAGE  
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PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: SAFE STORAGE: STORE AT OR BELOW 75 DEG. F. (CONTACT LOCTITE CUSTOMER SERVICE 1-800-243-4874 FOR SHELF LIFE INFORMATION). AVOID CONTACT WITH SKIN AND EYES. AVOID BREATHING OF VAPORS. AVOID CONTACT WITH CLOTHES, FABRICS, RAGS, OR TISSUE. CONTACT WITH THESE MATERIALS MAY CAUSE POLYMERIZATION.

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SECTION 08: EXPOSURE CONTROLS - PROTECTION  
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EYE PROTECTION: SAFETY GLASSES OR GOGGLES.

SKIN PROTECTION: NITRILE OR POLYETHYLENE APRONS. DO NOT USE COTTON. WEAR A NITRILE OR POLYETHYLENE APRON WHEN HANDLING LARGE AMOUNTS OF ADHESIVE.

RESPIRATORY PROTECTION: NOT AVAILABLE.

ENGINEERING CONTROLS: VENTILATION: POSITIVE DOWN-DRAFT EXHAUST VENTILATION SHOULD BE PROVIDED TO MAINTAIN VAPOR CONCENTRATION BELOW TLV.

PROTECTIVE GLOVES (SPECIFY TYPE): NITRILE OR POLYETHYLENE GLOVES. DO NOT USE COTTON. WEAR NITRILE OR POLYETHYLENE GLOVES WHEN HANDLING LARGE AMOUNTS OF ADHESIVE.

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SECTION 09: PHYSICAL & CHEMICAL PROPERTIES  
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OTHER VOLATILE ORGANIC COMPOUND RELATED DATA: 7.51LB/GAL  
ANALYTICAL VOC WITHOUT WATER: 7.51 BY W

BOILING POINT TEMPS: > 300.00F

SPECIFIC GRAVITY VALUES: = 1.0700

VAPOR DENSITY VALUES: = 3.0000

VAPOR DENSITY TEXT: APPROXIMATELY.

VAPOR PRESSURE TEXT: LESS THAN 0.2 MMHG AT 80 F.

EVAPORATION RATE TEXT: NOT AVAILABLE.

SOLUBILITY IN WATER TEXT: POLYMERIZED.

PH OF PRODUCT AS RECEIVED (NEAT)/TEXT: DOES NOT APPLY.

APPEARANCE: BLACK VISCOUS LIQUID.

ODOR: PUNGENT.

PHYSICAL STATE: LIQ

SECTION 9 - OTHER INFORMATION: VOLATILE ORGANIC COMPOUND (EPA METHOD 24): 84.1%; 900 GRAMS PER LITER=7.51 LBS/GAL ANALYTICAL. LESS THAN 20 G/L (CALIFORNIA SCAQMD METHOD 316B).

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SECTION 10: STABILITY & REACTIVITY  
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STABILITY INDICATOR: Y

STABILITY - TEXT: INCOMPATIBILITY: POLYMERIZED BY CONTACT WITH WATER, ALCOHOLS. CONDITIONS TO AVOID: NOT AVAILABLE.

HAZARDOUS DECOMPOSITION PRODUCTS: (NON-THERMAL): NONE.

HAZARDOUS POLYMERIZATION INDICATOR: N

HAZARDOUS POLYMERIZATION TEXT: THE POLYMERIZATION OF LARGE AMOUNTS OF ADHESIVE WILL GENERATE HEAT CAUSING SMOKE, SKIN BURNS, AND STRONG, IRRITATING VAPORS.

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SECTION 11: TOXICOLOGICAL INFORMATION  
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TOXICOLOGICAL DATA UNLIMITED TEXT: TOXICITY: ESTIMATED ORAL LD50 MORE THAN 5000 MG/KG. ESTIMATED DERMAL LD50 MORE THAN 2000 MG/KG. (123-31-9): MUTAGEN.

CARCINOGENICITY: CARCINOGEN: (7085-85-0), (54545-50-5), 85-44-9): NTP, IARC, OSHA: NO. (112945-52-5), (123-31-9): NTP, OSHA: NO; IARC: NOT APPLICABLE. (1333-86-4): NTP, OSHA: NO; IARC: 2B (POSSIBLY CARCINOGENIC TO HUMANS). (123-31-9): ACGIH ANIMAL CARCINOGEN. (85-44-9): ACGIH-UNCLASSIFIABLE AS HUMAN CARC.

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SECTION 12: ECOLOGICAL INFORMATION  
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ECOLOGICAL INFORMATION: NO DATA AVAILABLE.

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SECTION 13: DISPOSAL CONSIDERATIONS  
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WASTE DISPOSAL METHOD: RECOMMENDED METHODS OF DISPOSAL: POLYMERIZE. INCINERATE IN ACCORDANCE WITH EPA AND LOCAL REGULATIONS.

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SECTION 14: TRANSPORT INFORMATION  
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DOT INFORMATION: DOT (49 CFR 172): DOMESTIC GROUND TRANSPORT: PROPER SHIPPING NAME: UNRESTRICTED (NOT MORE THAN 450 LITERS); COMBUSTIBLE LIQUIDS, N.O.S. (CYANOACRYLATE ESTER) (MORE THAN 450 LITERS). HAZARD CLASS OR DIVISION: UNRESTRICTED (NOT MORE THAN 450 LITERS), COMBUSTIBLE LIQUID (MORE THAN 450 LITERS). IDENTIFICATION NUMBER: NONE (NOT MORE THAN 450 LITERS); NA1993 (MORE THAN 450 LITERS). MARINE POLLUTANT: NONE.

SECTION 14 - OTHER INFORMATION: IATA: PROPER SHIPPING NAME, CLASS OR DIVISION: UNRESTRICTED (NOT MORE THAN ONE PINT); AVIATION REGULATED LIQUID, N.O.S., (CYANOACRYLATE ESTER) (MORE THAN ONE PINT). UN OR ID NUMBER: NONE (NOT MORE THAN ONE PINT). UN3334 (MORE THAN ONE PINT).

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SECTION 15: REGULATORY INFORMATION  
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SARA 311/312 HAZARD INDICATORS:

IMMEDIATE HEALTH INDICATOR = Y  
DELAYED HEALTH INDICATOR = N

SECTION 15 - OTHER INFORMATION: CA PROPOSITION 65: WARNING: NO CALIFORNIA PROPOSITION 65 CHEMICALS ARE KNOWN TO BE PRESENT. ALL COMPONENTS ARE EITHER ON OR EXEMPT FROM THE TSCA INVENTORY. (123-31-9) AND (85-44-9) ARE LISTED AS A SARA SECTION 313 TOXIC CHEMICAL.

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SECTION 16: OTHER INFORMATION  
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RCRA HAZARDOUS WASTE NUMBER TEXT: EPA HAZARDOUS WASTE NUMBER: NOT A RCRA HAZARDOUS WASTE MATERIAL.

SAFE USE CATEGORY AND DESCRIPTION :

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05 ADHESIVES - SOLVENT-BASED POLYURETHANES,

REGULATORY IMPACTS (REG) AND ADDITIONAL HEALTH HAZARD STATEMENTS (HHS) :  
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CAS#: 000085449 PHTHALIC ANHYDRIDE

REG:

0001,0003,0004,0006,0007,0011,0012,0016,0017,0019,0020,0023  
0031,0032,0034,0037,0038,0039,0042,0047,0048,0056,0058,0059  
0061,0063,0065,0066,0084,0088,0089,0091,0104,0123

HHS:

OVEREXPOSURE MAY RESULT IN EYE, SKIN, RESPIRATORY IRRITATION. SKIN, RESPIRATORY SENSITIZATION.

CAS#: 000123319 HYDROQUINONE

REG:

0001,0003,0011,0012,0016,0017,0019,0020,0026,0031,0032,0034  
0035,0037,0038,0039,0041,0042,0047,0048,0053,0056,0061,0065  
0066,0083,0084,0088,0089,0104,0123

CAS#: 001333864 CARBON BLACK

REG:

0001,0003,0012,0019,0038,0039,0042,0056,0061,0065,0084,0113  
0122

HHS:

IARC CLASSIFICATION OF 2B - POSSIBLY CARCINOGENIC TO HUMANS.

CAS#: 007085850 2-Propenoic acid, 2-cyano-, ethyl ester

REG:

0012

CAS#: 054545505 2-Butenedioic acid (Z)-, monoethyl ester, polymer with

REG:

0012

CAS#: 112945525 SILICA, AMORPHOUS FUMED

REG:

0093,0098

REGULATORY KEY LIST:

0001	OSHA-PEL	0003	ACGIH-TLV	0004	GM-SPEC CHEM
0005	SUSP CARCIN	0006	EPA HW261.33	0007	EPA HW-APP 8
0008	MCMR	0009	FWPC-SEC 311	0010	EPA PRIORPOL
0011	NY SUBS CONC	0012	TSCA INV	0014	MI AIR POLLU
0015	SUP TAX CHEM	0016	MI HW-ACT 64	0017	CA HAZ SUBST
0018	NY SAN 22.8	0019	MA SUBST	0020	NJ ENV SUBST
0021	TOX ORGANICS	0022	MD CLASS I	0023	MD CLASS II
0024	EPA-ATC-I	0026	EPA-CHEMCONC	0027	WB VERY TOX
0028	WB OTHER TOX	0031	ALLGHNY CTY	0032	IL-RTK
0033	OSHA-HHCL	0034	FLT CRIT IND	0035	GM-AHC
0036	PRO EP TOX	0037	MO SPECIES	0038	MO-RTK
0039	ONT 654-86	0040	ONT DES SUB	0041	SARA312EXHAZ
0042	WI TABLE 1	0043	WI TABLE 2	0047	SARA 313
0048	CERCLASEC103	0049	P-65 CARCINO	0050	P-65 REP TOX
0051	MD CLSI .11	0052	MD CLSI .12	0053	MD CLSII .12
0054	CT 29-1	0055	CT 29-2	0056	CT 29-3
0058	EPA261.33(F)	0059	CA AIR TOX 1	0060	CA AIR TOX 2
0061	PA RTK	0063	PELS REVISED	0064	NPDES-TOXPOL
0065	NJ W&C RTK	0066	CAA HAZ POL	0067	NV HIGH HAZ.
0068	MI 307-CARC	0069	MI 307-NCARC	0070	MICH AIR
0071	CAA602 CLSI	0075	C	0076	D
0078	GREAT LAKES	0080	METALS	0082	EPA 112(R)
0083	TSCA 8(D)	0084	GM OEG	0085	TSCA-TEST
0087	TSCA 12(B)	0088	NAT. POLL. REL	0089	NY CHEM BULK
0090	GL PERSIST	0091	LAND DISP. - II	0092	UAW/GM AUDIT
0093	TSCA - SPECIAL	0095	FIFRA REG MAT	0098	DSL - CANADA
0099	NDSL - CANADA	0102	GM 1000M	0103	CAA SEC. 112(R)
0104	CERCLA-HAZWOPER	0105	GLPPP-SPECIFIC	0106	GLPPP-SPECIFIC
0107	PET. DISTILLATE	0109	APPENDIX IX	0110	GLOBAL WARM CMP
0112	RCRA PBT -DRAFT	0113	IARC-GROUP 2B	0115	IARC-GROUP 1
0116	GMW 3059-RESTR.	0117	GMW 3059-REPORT	0118	T.W. REPORT
0121	HEX CHROME, PB,	0122	ACDM-REPORTING	0123	MDEQ PART 5

GMBA/PLANT USING THIS FID:

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GMBA: 000550678 SPO - DISTRIBUTABLE MATERIALS

CISCO: 17001;

STATUS :ACTIVE

GMBA: 000550807 DELPHI E - FLINT EAST

CISCO: 31005;

STATUS :ACTIVE

GMBA: 000550830 DELPHI I - ANDERSON PLANT

CISCO: 36001;

STATUS :ACTIVE

GMBA: 000550834 DELPHI I - TRENTON MANUFACTURING

CISCO: 36123;

STATUS :ACTIVE

GMBA: 000550859 DELPHI C - MANUFACTURING - SAGINAW

CISCO: 41048;

STATUS :INACTIVE

GMBA: 000550865 DELPHI SAGINAW STEERING SYS. - SAGINAW

CISCO: 44001;  
STATUS :ACTIVE  
GMBA: 000550867 DELPHI SAGINAW STEERING SYS. - ATHENS  
CISCO: 44004;  
STATUS :ACTIVE  
GMBA: 000550902 DELPHI E - LEXINGTON PLANT - ROCHESTER  
CISCO: 58001;  
STATUS :ACTIVE  
GMBA: 000550957 CHEMICAL RISK MANAGEMENT  
CISCO: 89150;  
STATUS :ACTIVE  
GMBA: 000550960 GM DESERT PROVING GROUND  
CISCO: 91008;  
STATUS :ACTIVE  
GMBA: 000550966 GM PROVING GROUND - MILFORD  
CISCO: 94017;  
STATUS :ACTIVE  
GMBA: 000550976 GM TECHNICAL CENTER, TOTAL SITE  
CISCO: 96003;  
STATUS :ACTIVE  
GMBA: 000551424 SERVICE TECHNOLOGY HEADQUARTERS  
CISCO: 18400;  
STATUS :ACTIVE  
GMBA: 000552249 GMTG - WENTZVILLE ASSEMBLY  
STATUS :INACTIVE  
GMBA: 000556298 GM TECHNICAL CENTER, TOTAL SITE  
STATUS :ACTIVE  
GMBA: 000556705 ENVIRONMENTAL SYSTEMS HELPDESK  
CISCO: 99004;  
STATUS :ACTIVE  
GMBA: 000557289 GM TECHNICAL CENTER, R & D  
CISCO: 99010;  
STATUS :ACTIVE