LORD MATERIAL SAFETY DATA SHEET

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: LORD 406

Product Use/Class: ADHESIVE

LORD CORPORATION CHEMICAL PRODUCTS DIVISION 2000 WEST GRANDVIEW BLVD ERIE, PA 16514 **INFORMATION TELEPHONE: 814 868-3611**

TRANSPORTATION EMERGENCY CALL CHEMTREC: 800 424-9300

NON-TRANSPORTATION EMERGENCY: 814 763-2345

EFFECTIVE DATE: 08/01/2000

SUPERCEDES DATE: 10/07/1999

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

<u>Chemical</u> <u>Name</u>	<u>CAS</u> <u>Number</u>	<u>Weight</u> <u>%</u> <u>Less</u> <u>Than</u>	<u>ACGIH</u> <u>TLV-</u> <u>TWA</u>	<u>ACGIH</u> <u>TLV-</u> <u>STEL</u>	<u>OSHA</u> <u>PEL-</u> <u>TWA</u>	<u>OSHA</u> <u>PEL-</u> CEILING	<u>Units</u>	<u>Skin</u>
Methyl methacrylate	80-62-6	35 %	100	N.E.	100	N.E.	ppm	
Cyclohexyl methacrylate	101-43-9	4.0 %	N.E.	N.E.	N.E.	N.E.		
Methacrylate phosphate ester	Proprietary	3.0 %	N.E.	N.E.	N.E.	N.E.		
Methacrylic acid	79-41-4	3.0 %	20	N.E.	N.E.	N.E.	ppm	
Amine curative	Proprietary	2.0 %	N.E.	N.E.	N.E.	N.E.		
N,N- Dimethylaniline	121-69-7	2.0 %	5	10	5	N.E.	ppm	S

N.E. - Not Established, S - Skin Designation, C - Ceiling

SECTION 3 - HAZARDS IDENTIFICATION

*** **EMERGENCY OVERVIEW** ***: Off-white Paste, with Sweet odor. Flammable liquid. Harmful if absorbed through skin. May cause allergic skin reaction. Causes skin and eye irritation. Causes respiratory tract irritation.

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Causes eye irritation.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: May be absorbed through the skin in harmful amounts. May cause skin sensitization. May cause dermatitis. Causes skin irritation.

EFFECTS OF OVEREXPOSURE - INHALATION: May cause headache and nausea. Causes respiratory tract irritation.

EFFECTS OF OVEREXPOSURE - INGESTION: Harmful if swallowed. Ingestion is not an expected route of entry in industrial or commercial uses.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: May cause liver or kidney damage. Chronic skin contact may cause dermatitis.

PRIMARY ROUTE(S) OF ENTRY: Skin Contact, Inhalation, Ingestion, Eye Contact

SECTION 4 - FIRST AID MEASURES

FIRST AID- EYE CONTACT: Flush eyes immediately with large amount of water for at least 15 minutes holding eyelids open while flushing. Get prompt medical attention.

FIRST AID - SKIN CONTACT: Flush contaminated skin with large amounts of water while removing contaminated clothing. Wash affected skin areas with soap and water. Get medical attention if symptoms occur.

FIRST AID - INHALATION: Move person to fresh air. Restore and support continued breathing. If breathing is difficult, give oxygen. Get immediate medical attention.

FIRST AID - INGESTION: If swallowed, do not induce vomiting. Give victim one or two glasses of water or milk. Call a physician or poison control center immediately for further instructions. Never give anything by mouth to an unconscious person.

SECTION 5 - FIRE FIGHTING MEASURES

FLASH POINT: 59F, 15C (Setaflash Closed Cup)

LOWER EXPLOSIVE LIMIT (%): 1.00 UPPER EXPLOSIVE LIMIT (%): 8.80

AUTOIGNITION TEMPERATURE: N.D.

OSHA FLAMMABILITY CLASSIFICATION: FLAMMABLE LIQUID - CLASS IB

EXTINGUISHING MEDIA: Carbon Dioxide, Dry Chemical, Foam, Water Fog

UNUSUAL FIRE AND EXPLOSION HAZARDS: Flammable liquid and vapor. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks, open flame, and other sources of ignition. Closed containers may rupture when exposed to extreme heat. Use water spray to keep fire exposed containers cool.

SPECIAL FIREFIGHTING PROCEDURES: Wear full firefighting protective clothing, including self-contained breathing apparatus (SCBA). If water is used, fog nozzles are preferable. During a fire, irritating and/or toxic gases and particulate may be generated by thermal decomposition or combustion.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Keep non-essential personnel a safe distance away from the spill area. Remove all sources of ignition (flame, hot surfaces, and electrical, static or frictional sparks). Avoid breathing vapors. Use self-contained breathing equipment. Notify appropriate authorities if necessary. Avoid contact. Using non-sparking tools, scoop the spilled material into a container for proper disposal. (If necessary, use inert absorbent material to aid in containing the spill).

SECTION 7 - HANDLING AND STORAGE

HANDLING: Keep closure tight and container upright to prevent leakage. Ground and bond containers when transferring material. Avoid skin and eye contact. Wash thoroughly after handling. Avoid breathing of vapor or spray mists. Do not handle until all safety precautions have been read and understood. Use with adequate ventilation. Because empty containers may retain product residue and flammable vapors, keep away from heat, sparks and flame; do not cut, puncture or weld on or near the empty container. Do not smoke where this product is used or stored.

STORAGE: Refer to OSHA 29CFR Part 1910.106 "Flammable and Combustible Liquids" for specific storage requirements. Store only in well-ventilated areas. Keep container closed when not in use.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Sufficient ventilation in pattern and volume should be provided in order to maintain air contaminant levels below recommended exposure limits. Sufficient ventilation (using explosion-proof equipment) should be provided to prevent flammable vapor/air mixtures from accumulating.

RESPIRATORY PROTECTION: Contains a small amount of dimethylaniline (DMA) which has poor odor-warning properties. If the exposure limit for DMA is exceeded, an air-supplied respirator is recommended. Otherwise, a properly-fitted organic vapor, air purifying respirator is recommended. For emergency situations, confined space use, or other conditions where exposure limits may greatly exceeded, use an approved air-supplied respirator. Observe OSHA regulations (29CFR 1910.134) for respirator use.

SKIN PROTECTION: Use neoprene, nitrile, or rubber gloves to prevent skin contact.

EYE PROTECTION: Use safety eyewear including safety glasses with side shields and chemical goggles where splashing may occur.

OTHER PROTECTIVE EQUIPMENT: Use disposable or impervious clothing if work clothing contamination is likely. Remove and wash contaminated clothing before reuse.

HYGIENIC PRACTICES: Wash hands before eating, smoking, or using toilet facility. Food or beverages should not be consumed anywhere this product is handled or stored. Wash thoroughly after handling.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

BOILING RANGE:	140 - 379 F	VAPOR DENSITY:	Heavier than Air
APPEARANCE:	Off-white	EVAPORATION RATE:	Slower than Ether
PHYSICAL STATE:	Paste	DENSITY, LB/GL:	9.36
ODOR:	Sweet	SPECIFIC GRAVITY:	1.13
SOLUBILITY IN H2O:	Insoluble	pH:	N.A.
FREEZE POINT:	N.D.	ODOR THRESHOLD:	N.D.
VOLATILE BY WEIGHT:	0.0%	VOLATILE BY VOLUME:	0.0%
VAPOR PRESSURE:	N.D.		
COEFFICIENT OF WATER/OIL			
DISTRIBUTION:	N.D.		

(See section 16 for abbreviation legend)

SECTION 10 - STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Storage above 100 degrees F and below 32 degrees F. Exposure to sunlight, ultraviolet light irradiation. Avoid dropping or puncture of containers.

INCOMPATIBILITY: Inorganic acids, organic acids, caustics, amines, peroxides, polymerization inhibitors.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide, oxides of nitrogen.

HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur under normal conditions.

: No Data

STABILITY: Product is stable under normal storage conditions.

SECTION 11 - TOXICOLOGICAL INFORMATION

PRODUCT LD50 (ORAL): No Data

(DERMAL) : No Data

PRODUCT LC50

SECTION 12 - ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: No Information.

SECTION 13 - DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Disposal should be done in accordance with Federal (40CFR Part 261), state and local environmental control regulations. If waste is determined to be hazardous, use licensed hazardous waste transporter and disposal facility.

SECTION 14 - TRANSPORTATION INFORMATION

DOT PROPER SHIPPING NAME:ADHESIVEDOT HAZARD CLASS:3DOT UN/NA NUMBER:UN1133PACKING GROUP:IIEMERGENCY RESPONSE GUIDE127NUMBER:UN123

SECTION 15 - REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS: AS FOLLOWS -

OSHA: HAZARDOUS BY DEFINITION OF HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200)

SARA SECTION 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

CHEMICAL NAME	CAS NUMBER	<u>WT % IS LESS</u> <u>THAN</u>
Methyl methacrylate	80-62-6	35 %
N,N-Dimethylaniline	121-69-7	2.0 %

TOXIC SUBSTANCES CONTROL ACT:

INVENTORY STATUS

The chemical substances in this product are on the TSCA Section 8 Inventory.

EXPORT NOTIFICATION

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

NONE

INTERNATIONAL REGULATIONS: AS FOLLOWS -

CANADIAN WHMIS: This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

CANADIAN WHMIS CLASS: B2,D1A,D2A,D2B

SECTION 16 - OTHER INFORMATION

HMIS RATINGS - HEALTH: 2 FLAMMABILITY: 3 REACTIVITY: 1

* - Indicates a chronic hazard; see Section 3

REASON FOR REVISION: Revised Section 15; Whmis Classification

VOLATILE ORGANIC COMPOUNDS (Calculated): 0.00 lbs/gal, 0 grams/ltr

LEGEND: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

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DISCLAIMER

The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. It is the responsibility of the user to comply with all applicable federal, state and local laws and regulations.

LORD MATERIAL SAFETY DATA SHEET

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: LORD ACCELERATOR 17

Product Use/Class: ACCELERATOR

INFORMATION TELEPHONE: 814 868-3611
TRANSPORTATION EMERGENCY
CALL CHEMTREC: 800 424-9300
NON-TRANSPORTATION EMERGENCY: 814 763-2345

EFFECTIVE DATE: 06/08/2000

SUPERCEDES DATE: 04/20/2000

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

<u>Chemical</u> <u>Name</u>	<u>CAS</u> <u>Number</u>	<u>Weight</u> <u>% Less</u> <u>Than</u>		ACGIH TLV- STEL	<u>OSHA</u> <u>PEL-</u> <u>TWA</u>	<u>OSHA</u> <u>PEL-</u> CEILING	<u>Units</u>	<u>Skin</u>
Epoxy resin	Proprietary	45 %	N.E.	N.E.	N.E.	N.E.		
Diisobutyl phthalate	84-69-5	25 %	N.E.	N.E.	N.E.	N.E.		
Benzoyl peroxide	94-36-0	20 %	5	N.E.	5	N.E.	mg/m3	

N.E. - Not Established, S - Skin Designation, C - Ceiling

SECTION 3 - HAZARDS IDENTIFICATION

*** **EMERGENCY OVERVIEW** ***: Yellow, viscous Liquid, with No odor. May cause skin and eye irritation. May cause allergic skin reaction. May cause respiratory tract irritation.

EFFECTS OF OVEREXPOSURE - EYE CONTACT: May cause eye irritation.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: May cause skin irritation. May cause skin sensitization. May cause dermatitis.

EFFECTS OF OVEREXPOSURE - INHALATION: May cause respiratory tract irritation.

EFFECTS OF OVEREXPOSURE - INGESTION: Harmful if swallowed. Ingestion is not an expected route of entry in industrial or commercial uses.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: Chronic skin contact may cause dermatitis.

PRIMARY ROUTE(S) OF ENTRY: Skin Contact, Inhalation, Ingestion, Eye Contact

SECTION 4 - FIRST AID MEASURES

FIRST AID- EYE CONTACT: Flush eyes immediately with large amount of water for at least 15 minutes holding eyelids open while flushing. Get prompt medical attention.

FIRST AID - SKIN CONTACT: Flush contaminated skin with large amounts of water while removing contaminated clothing. Wash affected skin areas with soap and water. Get medical attention if symptoms occur.

FIRST AID - INHALATION: Move person to fresh air. Restore and support continued breathing. If breathing is difficult, give oxygen. Get immediate medical attention.

FIRST AID - INGESTION: If swallowed, do not induce vomiting. Give victim one or two glasses of water or milk. Call a physician or poison control center immediately for further instructions. Never give anything by mouth to an unconscious person.

SECTION 5 - FIRE FIGHTING MEASURES

FLASH POINT: > 200F, 94C (Setaflash Closed Cup)

LOWER EXPLOSIVE LIMIT (%): Not Applicable UPPER EXPLOSIVE LIMIT (%): Not Applicable

AUTOIGNITION TEMPERATURE: N.D.

OSHA FLAMMABILITY CLASSIFICATION: COMBUSTIBLE LIQUID - CLASS IIIB

EXTINGUISHING MEDIA: Carbon Dioxide, Dry Chemical, Foam, Water Fog

UNUSUAL FIRE AND EXPLOSION HAZARDS: Keep containers tightly closed. Closed containers may rupture when exposed to extreme heat. Use water spray to keep fire exposed containers cool.

SPECIAL FIREFIGHTING PROCEDURES: Wear full firefighting protective clothing, including self-contained breathing apparatus (SCBA). If water is used, fog nozzles are preferable. During a fire, irritating and/or toxic gases and particulate may be generated by thermal decomposition or combustion.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Avoid breathing vapors. Notify appropriate authorities if necessary. Avoid contact. Use appropriate respiratory protection for large spills or spills in confined area. Keep non-essential personnel away from spill area. Scoop spilled material into an appropriate container for proper disposal. (If necessary, use inert absorbent material to aid in containing the spill).

SECTION 7 - HANDLING AND STORAGE

HANDLING: Keep closure tight and container upright to prevent leakage. Avoid skin and eye contact. Wash thoroughly after handling. Do not handle until all safety precautions have been read and understood. Empty containers should not be re-used. Use with adequate ventilation.

STORAGE: Store only in well-ventilated areas. Keep container closed when not in use.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Sufficient ventilation in pattern and volume should be provided in order to maintain air contaminant levels below recommended exposure limits.

RESPIRATORY PROTECTION: Use a NIOSH/MSHA approved air-purifying organic vapor respirator if occupational limits are exceeded. For emergency situations, confined space use, or other conditions where exposure limits may be greatly exceeded, use an approved air-supplied respirator. Observe OSHA regulations (29CFR 1910.134) for respirator use.

SKIN PROTECTION: Use neoprene, nitrile, or rubber gloves to prevent skin contact.

EYE PROTECTION: Use safety eyewear including safety glasses with side shields and chemical goggles where splashing may occur.

OTHER PROTECTIVE EQUIPMENT: Use disposable or impervious clothing if work clothing contamination is likely. Remove and wash contaminated clothing before reuse.

HYGIENIC PRACTICES: Wash hands before eating, smoking, or using toilet facility. Food or beverages should not be consumed anywhere this product is handled or stored. Wash thoroughly after handling.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

BOILING RANGE:	212 - 212 F	VAPOR DENSITY:	Heavier than Air
APPEARANCE:	Yellow, viscous	EVAPORATION RATE:	Slower than Ether
PHYSICAL STATE:	Liquid	DENSITY, LB/GL:	10.00
ODOR:	No	SPECIFIC GRAVITY:	1.20
SOLUBILITY IN H2O:	Insoluble	рН:	N.A.
FREEZE POINT:	N.D.	ODOR THRESHOLD:	N.D.

VOLATILE BY WEIGHT:5.5%VAPOR PRESSURE:N.D.COEFFICIENT OF WATER/OILN.D.DISTRIBUTION:N.D.

(See section 16 for abbreviation legend)

SECTION 10 - STABILITY AND REACTIVITY

CONDITIONS TO AVOID: High temperatures.

INCOMPATIBILITY: Amines, acids, water, hydroxyl, or active hydrogen compounds.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide, aldehydes.

HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur under normal conditions.

STABILITY: Product is stable under normal storage conditions.

SECTION 11 - TOXICOLOGICAL INFORMATION

PRODUCT LD50	(ORAL)	: No Data
	(DERMAL)	: No Data
PRODUCT LC50		: No Data

SECTION 12 - ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: No Information.

SECTION 13 - DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Disposal should be done in accordance with Federal (40CFR Part 261), state and local environmental control regulations. If waste is determined to be hazardous, use licensed hazardous waste transporter and disposal facility.

SECTION 14 - TRANSPORTATION INFORMATION

DOT PROPER SHIPPING NAME:	ORGANIC PEROXIDE TYPE E, SOLID
DOT HAZARD CLASS:	5.2
DOT UN/NA NUMBER:	UN3108
PACKING GROUP:	II
EMERGENCY RESPONSE GUIDE NUMBER:	145

SECTION 15 - REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS: AS FOLLOWS -

OSHA: HAZARDOUS BY DEFINITION OF HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200)

SARA SECTION 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

CHEMICAL NAME	CAS NUMBER	WT % IS LESS
		THAN
Benzoyl peroxide	94-36-0	20 %

TOXIC SUBSTANCES CONTROL ACT:

INVENTORY STATUS

The chemical substances in this product are on the TSCA Section 8 Inventory.

EXPORT NOTIFICATION

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

CHEMICAL NAME

CAS NUMBER

Epoxy resin

Proprietary

INTERNATIONAL REGULATIONS: AS FOLLOWS -

CANADIAN WHMIS: This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

CANADIAN WHMIS CLASS: D2A,D2B

SECTION 16 - OTHER INFORMATION

HMIS RATINGS - HEALTH: 2 FLAMMABILITY: 1 REACTIVITY: 1

* - Indicates a chronic hazard; see Section 3

REASON FOR REVISION: Revised Section 3, 7, 8 and 10

VOLATILE ORGANIC COMPOUNDS (Calculated): 0.00 lbs/gal, 0 grams/ltr

LEGEND: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

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DISCLAIMER

The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. It is the responsibility of the user to comply with all applicable federal, state and local laws and regulations.