

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: **FUSOR 361 PART B**
 Product Use/Class: **EPOXY ADHESIVE, PART 2 OF 2**

LORD Corporation
 111 LORD Drive
 Cary, NC 27511-7923

Telephone: 814 868-3180
 Non-Transportation Emergency: 814 763-2345
 Chemtrec 24 Hr Transportation Emergency No.
 800 424-9300 (Outside Continental U.S. 703 527-3887)

EFFECTIVE DATE: 01/21/2015

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION:

Skin corrosion/irritation Category 2
 Serious eye damage/eye irritation Category 1
 Skin sensitization Category 1
 Respiratory sensitization Category 1
 Reproductive toxicity Category 2
 Specific target organ systemic toxicity (single exposure) Category 3
 Specific target organ systemic toxicity (repeated exposure) Category 2 Kidney
 Specific target organ systemic toxicity (repeated exposure) Category 1 Blood, Kidney
 Specific target organ systemic toxicity (repeated exposure) Category 1 Central nervous system
 Specific target organ systemic toxicity (repeated exposure) Category 1 Liver, Thyroid
 Hazardous to the aquatic environment - acute hazard Category 1
 Hazardous to the aquatic environment - chronic hazard Category 2

GHS LABEL ELEMENTS:

Symbol(s)



Signal Word

DANGER

Hazard Statements

Causes skin irritation.
 Causes serious eye damage.
 May cause an allergic skin reaction.
 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
 Suspected of damaging fertility or the unborn child.
 May cause respiratory irritation.
 May cause damage to organs through prolonged or repeated exposure if inhaled.(Kidney)
 May cause damage to organs through prolonged or repeated exposure if swallowed.(Kidney)
 Causes damage to organs through prolonged or repeated exposure in contact with skin.(Blood, Kidney)
 Causes damage to organs through prolonged or repeated exposure if swallowed.(Central nervous system)
 Causes damage to organs through prolonged or repeated exposure.(Liver, Thyroid)
 Very toxic to aquatic life.
 Toxic to aquatic life with long lasting effects.

Precautionary Statements

300000001284

Prevention

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wear protective gloves/eye protection/face protection.
Use personal protective equipment as required.
In case of inadequate ventilation wear respiratory protection.
Do not breathe dust/fume/gas/mist/vapors/spray.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing should not be allowed out of the workplace.
Avoid release to the environment.

Response

Immediately call a POISON CENTER or doctor/physician.
Specific treatment (see supplemental first aid instructions on this label).
IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
IF ON SKIN: Wash with plenty of soap and water.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
Take off contaminated clothing and wash before reuse.
Collect spillage.

Storage

Store in a well-ventilated place. Keep container tightly closed.
Store locked up.

Disposal:

Dispose of contents/container in accordance with waste/disposal laws and regulations of your country or particular locality.

Other Hazards:

This product contains component(s) which have the following warnings; however based on the GHS classification criteria of your country or locale, the product mixture may be outside the respective category(s).

Acute: Harmful if inhaled. Possible irritation of the respiratory system can occur causing a variety of symptoms such as dryness of the throat, tightness of the chest, and shortness of breath. Overexposure to vapor may cause headache, dizziness, unconsciousness and/or breathing difficulty. May be absorbed through the skin in harmful amounts. Eye contact may cause severe eye damage, including vision disturbances, corneal damage, and blindness. A skin corrosivity study performed on this product or a similar product concludes that it is not corrosive to skin. Moderately toxic and may be harmful if swallowed. Ingestion is not an expected route of entry in industrial or commercial uses.

Chronic: Extremely high vapor concentrations may cause lung damage. Prolonged or repeated contact may result in dermatitis. The modified amine in this product gave both positive and negative results in laboratory genetic toxicity studies.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Weight % Less Than
4-tert-Butyl phenol	98-54-4	35.0 %
Polyamine	PROPRIETARY	15.0 %
Nonylphenol	25154-52-3	15.0 %
Amine compound	PROPRIETARY	10.0 %
Amine compound	PROPRIETARY	0.9 %

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. Call a physician or poison control center immediately for further instructions. Never give anything by mouth if victim is rapidly losing consciousness, unconscious or convulsing.

5. FIRE-FIGHTING MEASURES

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

SPECIFIC HAZARDS POSSIBLY ARISING FROM THE CHEMICAL: Keep containers tightly closed. Closed containers may rupture when exposed to extreme heat. Use water spray to keep fire exposed containers cool. During a fire, irritating and/or toxic gases and particulate may be generated by thermal decomposition or combustion.

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE-FIGHTERS: Wear full firefighting protective clothing, including self-contained breathing apparatus (SCBA). If water is used, fog nozzles are preferable.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, AND EMERGENCY PROCEDURES: Avoid contact. Avoid breathing vapors. Use self-contained breathing equipment.

ENVIRONMENTAL PRECAUTIONS: Do not contaminate bodies of water, waterways, or ditches, with chemical or used container.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANUP: Keep non-essential personnel a safe distance away from the spill area. Notify appropriate authorities if necessary. Avoid contact. Before attempting cleanup, refer to hazard caution information in other sections of the SDS form. Scoop spilled material into an appropriate container for proper disposal. (If necessary, use inert absorbent material to aid in containing the spill).

7. HANDLING AND STORAGE

HANDLING: Keep closure tight and container upright to prevent leakage. 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. 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.

INCOMPATIBILITY: Strong acids, bases, and strong oxidizers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

COMPONENT EXPOSURE LIMIT

<u>Chemical Name</u>	<u>ACGIH TLV-TWA</u>	<u>ACGIH TLV-STEL</u>	<u>OSHA PEL-TWA</u>	<u>OSHA PEL-CEILING</u>	<u>Skin</u>
4-tert-Butyl phenol	N.E.	N.E.	N.E.	N.E.	N.A.
Polyamine	N.E.	N.E.	N.E.	N.E.	N.A.
Nonylphenol	N.E.	N.E.	N.E.	N.E.	N.A.
Amine compound	N.E.	N.E.	N.E.	N.E.	N.A.
Amine compound	1 ppm	N.E.	N.E.	N.E.	S

N.A. - Not Applicable, N.E. - Not Established, S - Skin Designation

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

PERSONAL PROTECTION MEASURES/EQUIPMENT:

RESPIRATORY PROTECTION: Use a NIOSH 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: 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Typical values, not to be used for specification purposes.

ODOR:	Amine	VAPOR PRESSURE:	N.D.
APPEARANCE:	White	VAPOR DENSITY:	Heavier than Air
PHYSICAL STATE:	Paste	LOWER EXPLOSIVE LIMIT:	Not Applicable
FLASH POINT:	≥ 201 °F, 93 °C	UPPER EXPLOSIVE LIMIT:	Not Applicable
	Setaflash Closed Cup		
BOILING RANGE:	N.A.	EVAPORATION RATE:	Slower than n-butyl-acetate
AUTOIGNITION TEMPERATURE:	N.D.	DENSITY:	0.94 g/cm ³ - 7.80 lb/gal
DECOMPOSITION TEMPERATURE:	N.D.	VISCOSITY, DYNAMIC:	N.D.
ODOR THRESHOLD:	N.D.	VISCOSITY, KINEMATIC:	N.D.
SOLUBILITY IN H₂O:	Insoluble	VOLATILE BY WEIGHT:	0.00 %
pH:	N.A.	VOLATILE BY VOLUME:	0.00 %
FREEZE POINT:	N.D.	VOC CALCULATED:	0 lb/gal, 0 g/10 g/l
COEFFICIENT OF WATER/OIL DISTRIBUTION:	N.D.		

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

10. STABILITY AND REACTIVITY

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

STABILITY: Product is stable under normal storage conditions.

CONDITIONS TO AVOID: High temperatures.

INCOMPATIBILITY: Strong acids, bases, and strong oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide, organic or inorganic nitrogen compounds including traces of hydrogen cyanide

11. TOXICOLOGICAL INFORMATION

EXPOSURE PATH: Refer to section 2 of this SDS.

SYMPTOMS: Refer to section 2 of this SDS.

TOXICITY MEASURES:

Chemical Name	LD50/LC50
4-tert-Butyl phenol	Oral LD50: Rat 2,990 mg/kg Dermal LD50: Rabbit 2,318 mg/kg

Polyamine	Oral LD50: Rat 2,500 mg/kg Dermal LD50: Rabbit 550 mg/kg
Nonylphenol	Oral LD50: Rat 580 mg/kg Dermal LD50: Rabbit 2,031 mg/kg
Amine compound	Oral LD50: Rat 2,140 mg/kg Dermal LD50: Rabbit 880 µL/kg
Amine compound	Oral LD50: Rat 1,080 mg/kg Dermal LD50: Rabbit 672 mg/kg Inhalation LC50: Rat 70 mg/l /4 h

12. ECOLOGICAL INFORMATION

ECOTOXICITY:

<u>Chemical Name</u>	<u>Ecotoxicity</u>
4-tert-Butyl phenol	<u>Fish</u> : Pimephales promelas 4.71 - 5.62 mg/196 h flow-through Cyprinus carpio 6.9 mg/196 h Static <u>Invertebrates</u> : Daphnia magna 3.9 mg/148 h Daphnia magna 3.4 - 4.5 mg/148 h Static <u>Plants</u> : Desmodemus subspicatus 11.2 mg/172 h
Polyamine	<u>Fish</u> : Poecilia reticulata 570 mg/196 h semi-static Pimephales promelas 495 mg/196 h <u>Invertebrates</u> : Daphnia magna 31.1 mg/148 h <u>Plants</u> : Desmodemus subspicatus 2.5 mg/172 h Pseudokirchneriella subcapitata 20 mg/172 h Pseudokirchneriella subcapitata 3.7 mg/196 h
Nonylphenol	<u>Fish</u> : Pimephales promelas 0.135 mg/196 h flow-through <u>Invertebrates</u> : Daphnia magna 0.14 mg/148 h Daphnia magna 0.17 - 0.21 mg/148 h Static Daphnia magna 0.0874 - 0.124 mg/148 h semi-static <u>Plants</u> : Pseudokirchneriella subcapitata 0.41 mg/196 h Desmodemus subspicatus 1.3 mg/172 h
Amine compound	<u>Fish</u> : Pimephales promelas 1,950 - 2,460 mg/196 h flow-through Poecilia reticulata > 1,000 mg/196 h semi-static Oncorhynchus mykiss >= 100 mg/196 h semi-static <u>Invertebrates</u> : Daphnia magna 32 mg/148 h <u>Plants</u> : Pseudokirchneriella subcapitata 495 mg/172 h
Amine compound	<u>Fish</u> : Poecilia reticulata 248 mg/196 h Static Poecilia reticulata 1,014 mg/196 h semi-static <u>Invertebrates</u> : Daphnia magna 16 mg/148 h <u>Plants</u> : Pseudokirchneriella subcapitata 1,164 mg/172 h Pseudokirchneriella subcapitata 345.6 mg/196 h Desmodemus subspicatus 592 mg/196 h

PERSISTENCE AND DEGRADABILITY: Not determined for this product.

BIOACCUMULATIVE: Not determined for this product.

MOBILITY IN SOIL: Not determined for this product.

OTHER ADVERSE EFFECTS: Not determined for this product.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose of contents/container in accordance with waste/disposal laws and regulations of your country or particular locality. 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.

14. TRANSPORT INFORMATION

US DOT Road

DOT Proper Shipping Name: Environmentally hazardous substances, liquid, n.o.s.
DOT Hazard Class: 9
SECONDARY HAZARD: None
DOT UN/NA Number: 3082
Packing Group: III
Emergency Response Guide Number: 171

For US DOT non-bulk road shipments this material may be classified as NOT REGULATED. For the most accurate shipping information, refer to your transportation/compliance department regarding changes in package size, mode of shipment or other regulatory descriptors.

IATA Cargo

PROPER SHIPPING NAME: Environmentally hazardous substance, liquid, n.o.s.
DOT Hazard Class: 9
HAZARD CLASS: None
UN-NUMBER: 3082
PACKING GROUP: III
EMS: 9L

IMDG

PROPER SHIPPING NAME: Environmentally hazardous substance, liquid, n.o.s.
DOT Hazard Class: 9
HAZARD CLASS: None
UN-NUMBER: 3082
PACKING GROUP: III
EMS: F-A

The listed transportation classification applies to IATA Cargo and IMDG non-bulk shipments. It does not address regulatory variations due to changes in package size, mode of shipment or other regulatory descriptors for your country or particular locality. For the most accurate shipping information, refer to your transportation/compliance department.

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS: AS FOLLOWS:

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.:

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Weight % Less Than</u>
Nonylphenol	25154-52-3	15.0 %

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

16. OTHER INFORMATION

Under HazCom 2012 it is optional to continue using the HMIS rating system. It is important to ensure employees have been trained to recognize the different numeric ratings associated with the HazCom 2012 and HMIS schemes.

HMIS RATINGS - HEALTH: 3* FLAMMABILITY: 1 PHYSICAL HAZARD: 0

* - Indicates a chronic hazard; see Section 2

Revision: New GHS SDS Format

Effective Date: 01/21/2015

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.