

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: FUSOR 121, 124 FLEXIBLE FOAM PART A

Product Use/Class: STRUCTURAL URETHANE

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: 08/21/2014

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Weight % Less Than	ACGIH TLV- TWA	ACGIH TLV- STEL	OSHA PEL- TWA	OSHA PEL- CEILING	<u>Skin</u>
Amine catalyst	PROPRIETARY	5.0 %	N.E.	N.E.	N.E.	N.E.	N.A.
Tin catalyst	PROPRIETARY	5.0 %	0.1 mg/m3	0.2 mg/m3	0.1 mg/m3	N.E.	S

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

3. HAZARDS IDENTIFICATION

*** EMERGENCY OVERVIEW ***: Black Liquid, with Aromatic odor. Harmful if absorbed through skin. May cause skin and eye irritation. May cause allergic skin reaction. May cause respiratory tract irritation.

EFFECTS OF OVEREXPOSURE - EYE CONTACT: May cause severe eye irritation on contact, with conjunctivitis and potential corneal injury if not promptly and adequately treated.

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

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

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. Prolonged or repeated contact may result in dermatitis.

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

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.

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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

FLASH POINT: ≥ 201 °F, 93 °C **LOWER EXPLOSIVE LIMIT (%):** Not Applicable Setaflash Closed Cup **UPPER EXPLOSIVE LIMIT (%):** Not Applicable

AUTOIGNITION TEMPERATURE: N.D.

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. During a fire, irritating and/or toxic gases and particulate may be generated by thermal decomposition or combustion.

SPECIAL FIREFIGHTING PROCEDURES: Wear full firefighting protective clothing, including self-contained breathing apparatus (SCBA). If water is used, fog nozzles are preferable.

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. Avoid breathing vapors. Use self-contained breathing equipment. Notify appropriate authorities if necessary. Avoid contact. Before attempting cleanup, refer to hazard caution information in other sections of the MSDS 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.

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 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

Product: FUSOR 121, 124 FLEXIBLE FOAM PART A, Effective Date: 08/21/2014

ODOR: Aromatic **BOILING RANGE:** 100 °C **APPEARANCE:** Black **VAPOR PRESSURE:** N.D.

PHYSICAL STATE: Liquid VAPOR DENSITY: Heavier than Air ODOR THRESHOLD: N.D. EVAPORATION RATE: Slower than n-butyl-

acetate

SOLUBILITY IN H2O:InsolubleDENSITY, LB/GL:8.61 lb/galpH:N.A.VOLATILE BY WEIGHT:2.02 %FREEZE POINT:N.D.VOLATILE BY VOLUME:2.08 %

COEFFICIENT OF WATER/OIL N.D.

DISTRIBUTION:

(See section 16 for abbreviation legend)

10. STABILITY AND REACTIVITY

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, Ammonia, Nitric acid, Oxides of nitrogen

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

STABILITY: Product is stable under normal storage conditions.

11. TOXICOLOGICAL INFORMATION

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

12. ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: No Information

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.

14. TRANSPORT INFORMATION

This product is NOT REGULATED for non-bulk US DOT Road, IATA Cargo or IMDG shipments. For the most accurate shipping information, refer to your transportation/compliance department regarding changes in package size, mode of shipment or other regulatory descriptors.

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS: AS FOLLOWS -

This product is considered hazardous as defined by 29 CFR 1910.1200 (OSHA HazCom Standard.)

SARA SECTION 313

Product: FUSOR 121, 124 FLEXIBLE FOAM PART A, Effective Date: 08/21/2014

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.:

NONE

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

HMIS RATINGS - HEALTH: 2* FLAMMABILITY: 1 PHYSICAL HAZARD: 1

* - Indicates a chronic hazard; see Section 3

VOLATILE ORGANIC COMPOUNDS

Calculated: 0 lb/gal, 0 g/l

Revision: Section 1

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

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.



MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: FUSOR 121, 124 FLEXIBLE FOAM PART B

Product Use/Class: STRUCTURAL URETHANE

Reference: Applies to Stock Number 121, 124

LORD CORPORATION 111 LORD DRIVE CARY, NC 27511-7923 TRANSPORTATION EMERGENCY: CHEMTREC 24 HR EMERGENCY NO. 800 424-9300

(Outside Continental U.S. 703 527-3887)

NON-TRANSPORTATION EMERGENCY: 814 763-2345

INFORMATION TELEPHONE: 814 868-0924

EFFECTIVE DATE: 02/16/2011

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Weight % Less Than	ACGIH TLV- TWA	ACGIH TLV- STEL	OSHA PEL- TWA	OSHA PEL- CEILING	Skin
4,4'-Diphenylmethane diisocyanate	101-68-8	35.0 %	0.005 ppm	N.E.	N.E.	0.2 mg/m3 0.02 ppm	N.A.
2,2,4-Trimethyl-1,3- pentanediol diisobutyrate	6846-50-0	25.0 %	N.E.	N.E.	N.E.	N.E.	N.A.
Diphenylmethane diisocyanate	26447-40-5	15.0 %	N.E.	N.E.	N.E.	N.E.	N.A.
Aromatic polyisocyanate	PROPRIETARY	10.0 %	N.E.	N.E.	N.E.	N.E.	N.A.

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

3. HAZARDS IDENTIFICATION

*** **EMERGENCY OVERVIEW** ***: Yellow Liquid, with Pungent odor. Harmful if inhaled. May cause allergic skin reaction. May cause allergic respiratory reaction. Causes skin and eye irritation. Causes respiratory tract irritation.

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Causes eye irritation.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: May cause skin sensitization. May cause dermatitis. Causes skin irritation. Animal tests have indicated that respiratory sensitization can result from skin contact with certain isocyanates.

EFFECTS OF OVEREXPOSURE - INHALATION: 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. Allergic conditions can occur in certain individuals with high sensitivity to isocyanates; this may result in asthma-like symptoms. May cause respiratory sensitization. May cause lung damage.

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 long-term lung damage. Prolonged or repeated contact may result in dermatitis.

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

4. FIRST AID MEASURES

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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 if victim is rapidly losing consciousness, unconscious or convulsing.

5. FIRE-FIGHTING MEASURES

FLASH POINT: 201 °F, 93 °C

Setaflash Closed Cup

LOWER EXPLOSIVE LIMIT (%): Not Applicable

UPPER EXPLOSIVE LIMIT (%): Not Applicable

AUTOIGNITION TEMPERATURE: N.D.

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

UNUSUAL FIRE AND EXPLOSION HAZARDS: During a fire, irritating and/or toxic gases and particulate may be generated by thermal decomposition or combustion. 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.

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. Avoid breathing vapors. Use self-contained breathing equipment. Notify appropriate authorities if necessary. Avoid contact. Before attempting cleanup, refer to hazard caution information in other sections of the MSDS 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.

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: This product contains isocyanates which have poor odor warning properties. If occupational exposure limits are exceeded, a NIOSH approved supplied-air respirator is required. 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.

Product: FUSOR 121, 124 FLEXIBLE FOAM PART B, Effective Date: 02/16/2011

OTHER PROTECTIVE EQUIPMENT: Use disposable or impervious clothing if work clothing contamination is likely. Remove and wash contaminated clothing before reuse. Use long-sleeved shirt to minimize skin exposure.

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

ODOR: Pungent **BOILING RANGE:** 280 °C **APPEARANCE:** Yellow **VAPOR PRESSURE:** N.D.

Heavier than Air PHYSICAL STATE: Liquid VAPOR DENSITY: N.D. **EVAPORATION RATE:** Not Applicable **ODOR THRESHOLD:** 9.3 lb/gal **SOLUBILITY IN H2O:** Insoluble **DENSITY, LB/GL:** N.A. **VOLATILE BY WEIGHT:** 0.00 % pH: FREEZE POINT: N.D. **VOLATILE BY VOLUME:** 0.00 %

COEFFICIENT OF WATER/OIL N.D.

DISTRIBUTION:

(See section 16 for abbreviation legend)

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID: High temperatures.

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

HAZARDOUS DECOMPOSITION PRODUCTS: Monomeric isocyanate, traces of hydrogen cyanide, nitrogen dioxide., Carbon monoxide, carbon dioxide.

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

STABILITY: Product is stable under normal storage conditions.

11. TOXICOLOGICAL INFORMATION

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

PRODUCT LC50 No Data

12. ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: No Information

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.

14. TRANSPORT INFORMATION

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SARA SECTION 313

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<u>Chemical Name</u>	<u>CAS Number</u>	Weight % Less Than
4,4'-Diphenylmethane diisocyanate	101-68-8	35.0 %
Diphenylmethane diisocyanate	26447-40-5	15.0 %
Aromatic polyisocyanate	PROPRIETARY	10.0 %

TOXIC SUBSTANCES CONTROL ACT:

INVENTORY STATUS

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EXPORT NOTIFICATION

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NONE

16. OTHER INFORMATION

HMIS RATINGS - HEALTH: 2* FLAMMABILITY: 1 PHYSICAL HAZARD: 1

VOLATILE ORGANIC COMPOUNDS

Calculated: 0 lb/gal, 0 g/l

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

DISCLAIMER

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^{* -} Indicates a chronic hazard; see Section 3