



**GAF**  
**Safety Data Sheet**  
**SDS # 2176**  
**SDS Date: April 2024**

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**SECTION 1: PRODUCT AND COMPANY INFORMATION**

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**PRODUCT NAME:** LRF Adhesive O Part B

**MANUFACTURER:** GAF

**ADDRESS:** 1 Campus Drive, Parsippany, NJ 07054

**24 HOUR EMERGENCY PHONE: (CHEMTREC)** 800-424-9300

**INFORMATION ONLY:** 877-GAF-ROOF

**APPROVED BY:** Corporate EHS

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**SECTION 2: HAZARDS IDENTIFICATION**

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**NFPA and HMIS RATINGS:**

	NFPA Hazard Rating		HMIS Hazard Rating
Health	1	Health	1
Flammable	1	Flammable	1
Reactive	0	Reactive	0
Special Hazards	-	Personal Protection	X

**GHS LABEL ELEMENTS:** Acute Oral Toxicity Category 4  
Reproductive Toxicity Category 2  
Physical Hazards Not Otherwise Classified: None  
Health Hazards Not Otherwise Classified: None

**GHS PICTOGRAM:**



**SIGNAL WORD:** Warning

**HAZARD  
STATEMENTS:**

Harmful if swallowed.  
Suspected of damaging fertility or the unborn child.

**PRECAUTIONARY  
STATEMENTS:**

Obtain, read and follow all safety instructions before use.  
Wash hands thoroughly after handling.  
Do not eat, drink or smoke when using this product.  
Wear protective gloves, protective clothing and eye protection.  
IF SWALLOWED: Call a POISON CENTER or doctor if you feel  
unwell. Rinse mouth.  
If exposed or concerned: get medical advice.  
  
Store locked up.  
  
Dispose of contents/container in accordance with applicable  
regulations.

**ADDITIONAL HAZARD IDENTIFICATION INFORMATION:****SIGNS & SYMPTOMS OF EXPOSURE****EYES:**

This product may cause mild eye irritation.

**SKIN:**

This product may cause mild skin irritation. Irritation may be  
more pronounced on abraded skin.

**INGESTION:**

Harmful if swallowed. May cause nausea, vomiting, and/or  
gastrointestinal irritation.

**INHALATION:**

Inhalation of toxicologically significant quantities of ingredients is  
unlikely when the product is used in a well-ventilated area and in  
accordance with instructions.

**ACUTE HEALTH HAZARDS:**

See above.

**CHRONIC HEALTH HAZARDS:**

Long-term chronic ingestion may damage the kidneys and the  
gastrointestinal system.

**CARCINOGENICITY:**

None known.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

			OCCUPATIONAL EXPOSURE LIMITS		
CHEMICAL NAME	CAS #	% (BY WT)	OSHA	ACGIH	OTHER
Diethylene Glycol	111-46-6	10 - 20	NE	NE	10 mg/m3 AIHA WEEL
Polypropylene Glycol	25322-69-4	10 - 20	NE	NE	10 mg/m3 AIHA WEEL

2,2,4-trimethyl-1,3-pent anediol diisobutyrate	6846-50-0	<10	NE	NE	NE
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Balance of other ingredients are non-hazardous or less than 1% in concentration (or 0.1% for carcinogens, reproductive toxins, or respiratory sensitizers).

NE = Not Established

#### SECTION 4: FIRST AID MEASURES

##### FIRST AID PROCEDURES

<b>EYES:</b>	Immediately flush eyes with water for at least 15 minutes while holding eyelids open. Remove contact lenses, if present. Seek medical attention.
<b>SKIN:</b>	Wash exposed skin with soap and water. If irritation develops or persists, seek medical attention. Discard contaminated clothing.
<b>INHALATION:</b>	If signs and symptoms of respiratory toxicity are observed, remove subject from area and seek immediate medical attention. Keep the subject warm and at rest. If necessary, administer oxygen or perform artificial respiration if necessary and qualified personnel are available to do so.
<b>INGESTION:</b>	DO NOT induce vomiting. If the subject is conscious, wash mouth and give 2 or more cups of milk or water. Seek medical assistance. Do not attempt to give anything by mouth to an unconscious or convulsive person.
<b>NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:</b>	This product is harmful by ingestion. Eye contact can cause mild irritation. Skin contact can cause mild irritation. Ingestion is unlikely to occur in industrial use, but if ingestion occurs it may cause nausea, vomiting, and gastrointestinal irritation.

#### SECTION 5: FIRE FIGHTING PROCEDURES

<b>SUITABLE EXTINGUISHING MEDIA:</b>	Water spray, carbon dioxide, dry chemical or chemical foam. DO NOT use water jet.
<b>HAZARDOUS COMBUSTION PRODUCTS:</b>	Carbon dioxide, carbon monoxide, other undetermined compounds.
<b>RECOMMENDED FIRE FIGHTING PROCEDURES:</b>	Firefighters should wear full protective clothing including self contained breathing apparatus.
<b>UNUSUAL FIRE &amp; EXPLOSION HAZARDS:</b>	This product may ignite if exposed to sources of ignition at temperatures above its flash point. If present in a fire or explosion, potential thermal decomposition byproducts include carbon monoxide, smoke, and irritant decomposition byproducts.

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**SECTION 6: ACCIDENTAL RELEASE MEASURES**

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**ACCIDENTAL RELEASE MEASURES:**

Absorb spilled material with an inert sorbent such as vermiculite, or calcium silicate hydrate. When absorbed, transfer to an impervious container.

Avoid contact with skin, eyes, and mucous membranes. Wear appropriate personal protective equipment (see Section #8) during cleanup and decontamination.

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**SECTION 7: HANDLING AND STORAGE**

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**HANDLING AND STORAGE:**

Containers should be kept tightly closed to prevent contact with moisture and other chemicals. Do not reuse empty containers for any purpose. When handling this product, avoid contact with eyes, skin, clothing, using protective equipment as needed. Do not use this product around children and secure it away from children.

To prevent ingestion or contact following use of this product, wash hands and face before eating, drinking, applying cosmetics, or using tobacco. Remove contaminated clothing and protective equipment before entering eating/drinking areas.

**OTHER PRECAUTIONS:**

Store containers tightly sealed in a dry, well-ventilated area away from incompatible materials (see Section #10). Recommended temperature range for storage is 55-85°F. (12.8-29.4°C.).

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**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

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**ENGINEERING CONTROLS /  
VENTILATION:**

Provide adequate local ventilation to maintain worker exposure below exposure limits.

**RESPIRATORY PROTECTION:**

When workers are facing concentrations above the occupational exposure limits they must use appropriate NIOSH certified respirators.

**EYE PROTECTION:**

Wear safety glasses and a face shield or chemical goggles.

**SKIN PROTECTION:**

Wear protective gloves and clothing to prevent skin irritation or injury from contact with the product. Glove materials known to be effective against permeation by this product include butyl rubber, nitrile rubber, and polyvinyl alcohol.

**OTHER PROTECTIVE EQUIPMENT:**

Eye wash stations and safety showers are recommended.

**WORK HYGIENIC PRACTICES:**

Wash exposed skin prior to eating, drinking or smoking and at the end of each shift. Immediately remove all soiled and contaminated clothing. Avoid contact with the skin.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

<b>APPEARANCE &amp; ODOR:</b>	Brown viscous liquid with a mildly sweet odor.		
<b>FLASH POINT:</b>	~375°F./191°C.	<b>LOWER EXPLOSIVE LIMIT:</b>	Not Determined
<b>METHOD USED:</b>	Open cup	<b>UPPER EXPLOSIVE LIMIT:</b>	Not Determined
<b>EVAPORATION RATE:</b>	Not Determined	<b>BOILING POINT:</b>	Not Determined
<b>IGNITION TEMPERATURE:</b>	Not Determined	<b>MELTING POINT:</b>	Not Determined
<b>SOLUBILITY IN WATER:</b>	Partly	<b>DENSITY</b>	Not Determined
<b>VAPOR DENSITY:</b>	Not Determined	<b>pH:</b>	Not Determined
<b>VAPOR PRESSURE:</b>	Not Determined	<b>MOLECULAR WEIGHT:</b>	Not Determined
<b>VOC AFTER MIXING (G/L):</b>	<5		

**SECTION 10: STABILITY AND REACTIVITY****THERMAL STABILITY:****STABLE X****UNSTABLE** ☐**CONDITIONS TO AVOID (STABILITY):**

Polymerizes with isocyanate-containing substances.

**INCOMPATIBILITY (MATERIAL TO AVOID):**

Oxidizing agents.

**HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:**

Carbon monoxide, carbon dioxide, smoke, and irritant decomposition byproducts

**HAZARDOUS POLYMERIZATION:**

Will not occur.

**SECTION 11: TOXICOLOGICAL INFORMATION****Ingredients Toxicology Data****LD<sub>50</sub> Oral****LD<sub>50</sub> Dermal****LC<sub>50</sub>**

Diethylene Glycol

16,500 mg/kg (rat)

13,330 mg/kg  
(rabbit)

&gt;4.6 mg/L/4h (rat)

Polypropylene Glycol

1000-2000 mg/kg  
(rat)>10000 mg/kg  
(rabbit)

No data available

2,2,4-trimethyl-1,3-pentanediol  
diisobutyrate

&gt;2000 mg/kg (rat)

>2,000 mg/kg  
(rabbit)>0.12 mg/L/6h  
(rat)**Primary Route(s) of Entry:**

Inhalation; ingestion

**Eye Hazards:**

This product may cause mild eye irritation.

**Skin Hazards:**

This product may cause mild skin irritation. Irritation may be

more pronounced on abraded skin.

**Ingestion Hazards:**

Harmful if swallowed. May cause nausea, vomiting, and/or gastrointestinal irritation.

**Inhalation Hazards:**

Inhalation of toxicologically-significant quantities of ingredients is unlikely when the product is used in a well-ventilated area and in accordance with instructions.

**Symptoms Related to Overexposure:**

Inhalation overexposure may cause respiratory irritation.

**Delayed Effects from Long Term Overexposure:**

Long-term chronic ingestion may damage the kidneys and the gastrointestinal system.

**Carcinogenicity:**

No ingredients are classified as potential or confirmed human carcinogens by OSHA, NTP, or IARC.

**Germ Cell Mutagenicity: Reproductive Toxicity:**

No ingredients have been determined to be germ cell mutagens. 2,2,4-trimethyl-1,3-pentanediol diisobutyrate is suspected to be damaging to fertility or to the unborn child.

**Acute Toxicity Estimates:**

LD50 (oral): 1667 mg/kg

LD50 (dermal): >2,000 mg/k

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**SECTION 12: ECOLOGICAL INFORMATION****Diethylene Glycol**

Aquatic Toxicity to Fish:

LC50 = >100 mg/l. for 96 h. (fathead minnows)

Aquatic Toxicity to Invertebrates:

EC50 = >10,000 mg/l. for 48 h. (daphnia)

Readily biodegradable.

**Polypropylene Glycol**

Aquatic Toxicity to Fish:

LC50 = >100 mg/l. for 96 h

Readily biodegradable, not bioaccumulative

**2,2,4-trimethyl-1,3-pentanediol diisobutyrate**

Aquatic Toxicity to Fish:

LC50 = >6 mg/l. for 96 h. (limit of solubility)

Aquatic Toxicity to Invertebrates:

EC50 = >1.46 mg/l. for 48 h. (daphnia)

(limit of solubility)

Chronic Toxicity to Invertebrates:

NOEC 0.7 mg/L/21d (daphnia)

Readily biodegradable, not bioaccumulative

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**SECTION 13: DISPOSAL CONSIDERATIONS****Waste disposal of substance:**

Do not discharge waste product into sanitary or storm sewers or allow it to contaminate soil. Empty containers should be

decontaminated prior to disposal. Consult applicable Federal, State/Provincial, and local regulations.

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**SECTION 14: TRANSPORTATION INFORMATION**

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**DOT**

Not classified as a dangerous good under transport regulations.

**IATA**

Not classified as a dangerous good under transport regulations.

**IMDG**

Not classified as a dangerous good under transport regulations.

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**SECTION 15: REGULATORY INFORMATION**

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**Federal Regulations****Registration status:**

Chemical      TSCA, US      All ingredients of this product are listed in the TSCA Registry.

**311/312 HAZARD CATEGORIES:**      Acute, Chronic Health Hazard

**EPCRA 311/312 (Hazard categories):** This product contains no ingredients in concentrations >1% (>0.1% for carcinogens) regulated under Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 or 40 CFR 372.

**CALIFORNIA PROP. 65:** Not applicable.

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**SECTION 16: OTHER INFORMATION**

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**ADDITIONAL COMMENTS:**      None

**DATE OF PREVIOUS SDS:**      2/2018

**CHANGES SINCE PREVIOUS SDS:**      Ingredient change.

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