



GAF
Safety Data Sheet
SDS # 4037
SDS Date: December 2022

SECTION 1: PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: LRF Adhesive XF 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

SECTION 2: HAZARDS IDENTIFICATION

NFPA and HMIS RATINGS:

	NFPA Hazard Rating		HMIS Hazard Rating
	1		2
	1		1
	1		1
Special Hazards	-	Personal Protection	X

GHS LABEL ELEMENTS:

Germ Cell Mutagenicity	1
Skin Sensitization	1
Reproductive Toxicity	1B (fertility)
Reproductive Toxicity	1B (unborn child)
Specific Target Organ Toxicity	1 repeated exposure
Specific Target Organ Toxicity	2 repeated exposure
Gases under pressure	Compressed Gas
Simple Asphyxiant	Simple Asphyxiant

GHS PICTOGRAMS:



SIGNAL WORD: Danger

**HAZARD
STATEMENTS:**

Contains gas under pressure, may explode if heated.
 May displace oxygen and cause rapid suffocation.
 May cause damage to organs (kidney, thalmus gland) through prolonged or repeated exposure.
 May cause an allergic skin reaction.
 Suspected of causing genetic affects.
 May damage fertility. May damage the unborn child.

**PRECAUTIONARY
STATEMENTS:**

Obtain special instructions before use.
 Do not handle until all safety precautions have been read and understood.
 Do not breathe dust/fume/gas/mist/vapors/spray.
 Wash thoroughly after handling.
 Use only outdoors or in a well-ventilated area.
 Contaminated work clothing must not be allowed out of the workplace.
 Avoid release to the environment.
 Wear protective gloves/protective clothing/eye protection/face protection.
 [In case of inadequate ventilation] wear respiratory protection.
 If on skin: Wash with plenty of water.
 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
 Continue rinsing.
 IF exposed or concerned: Get medical advice/attention.
 Call a poison center/doctor if you feel unwell.
 Specific treatment (see on this label).
 Get medical advice/attention if you feel unwell.
 Take off contaminated clothing and wash it before reuse.
 If skin irritation or rash occurs: Get medical advice/attention.
 If eye irritation persists: Get medical advice/attention.
 If experiencing respiratory symptoms: Call a poison center/doctor.

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

EYES:	This product is irritating to the eyes.
SKIN:	This product is irritating to the skin. This product may cause an allergic skin reaction.
INGESTION:	This product is not expected to be ingested. However, ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea.
INHALATION:	Allergic lung reaction such as asthma, which includes coughing, wheezing, chest pain and tightness, difficulty breathing and shortness of breath.
ACUTE HEALTH HAZARDS:	See above.
CHRONIC HEALTH HAZARDS:	Repeated inhalation and skin contact exposures may cause sensitization.

CARCINOGENICITY: None known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS #	% (BY WT)	OCCUPATIONAL EXPOSURE LIMITS		
			OSHA	ACGIH	OTHER
Diethylene Glycol	111-46-6	1 - 3	NE	NE	NE
Stannane, dibutylbis(dodecylthio)-	1185-81-5	0.3 - 3	0.1 mg/m3	0.1 mg/m3	0.2 mg/m3
1-Dodecanethiol	112-55-0	0 - 0.1	NE	0.1 ppm	NE
Trans-1,3,3,3-Tetrafluoro prop-1-ene	29118-24-9	3 - 7	NE	NE	NE
Nitrogen	7727-37-9	0 - 1	NE	NE	NE

NE = Not Established

SECTION 4: FIRST AID MEASURES

FIRST AID PROCEDURES

EYES: Immediately flush eyes with water for at least 15 minutes while holding eyelids open. Remove contact lenses, if present. Seek medical attention.

SKIN: Wash exposed skin with soap and water. If irritation develops or persists, seek medical attention. Discard contaminated clothing.

INHALATION: Move affected individual to an area free of risk from further exposure. Administer oxygen or artificial respiration as needed. Immediate or delayed asthma-like symptoms may develop. Seek medical attention.

INGESTION: If the material is swallowed, seek immediate medical attention. Rinse out mouth with water. Drink 1 - 2 glasses of water but DO NOT induce vomiting. Never give anything by mouth to a victim who is unconscious or is having convulsions.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: Specific antidotes or neutralizers do not exist. Treatment: Treatment should be supportive and based on the judgement of the physician in response to the reaction of the patient.

Information on: diethylene glycol

Symptoms: Overexposure may cause: vomiting, coma, abdominal cramps, lethargy, nausea, diarrhea, headache

Information on: 1-Dodecanethiol

Symptoms: Overexposure may cause: corneal injury, skin corrosion, severe pain, coughing, respiratory disorders, dyspnea, allergic contact dermatitis, nausea, headache, vomiting, dizziness, diarrhea, abdominal cramps, Ingestion may provoke the following symptoms: asphyxia, choking, respiratory arrest, circulatory collapse, death.

Additional Hazards: Symptoms can appear later.

SECTION 5: FIRE FIGHTING PROCEDURES

SUITABLE EXTINGUISHING MEDIA:	Water spray, carbon dioxide, foam or dry chemical. Fight larger fires with water spray. Use fire fighting measures that suit the environment.
HAZARDOUS COMBUSTION PRODUCTS:	Carbon dioxide, carbon monoxide, other undetermined compounds.
RECOMMENDED FIRE FIGHTING PROCEDURES:	Firefighters should wear full protective clothing including self contained breathing apparatus.
UNUSUAL FIRE & EXPLOSION HAZARDS:	Containers may burst if overheated. Do not reseal contaminated containers as a hazardous pressure build up could result in container rupture.

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES:	Wear suitable personal protective clothing and equipment. High risk of slipping due to leakage/spillage of product. Do not discharge into drains/surface waters/groundwater/subsoil/soil. Spills should be contained, solidified, and placed in suitable containers for disposal. Dispose in accordance with federal, state, and local regulations.
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SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE:	<p>Keep cylinders (valves) closed tightly during transport and storage. Do not puncture as contents are under pressure. Protect from moisture and sunlight. Avoid inhalation of dusts/mists/vapors during application and only use product in a well-ventilated area. Avoid contact with eyes, skin, and clothing. Wear protective equipment as required. Do not reuse cylinders for any purpose.</p> <p>Protection against fire and explosion: No special precautions necessary. Contents under pressure. Extreme temperatures (>170° F) can cause cylinders to rupture or explode</p> <p>Storage stability: Protect against freezing. Do not store above 95°F. The stated temperature limit is noted for health and safety in the workplace. To maximize product shelf life, ideal storage temperature is 55-90° F.</p>
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OTHER PRECAUTIONS: Empty containers may contain hazardous residuals. Keep away from heat, sparks and open flame. DO NOT cut, drill, puncture, weld or grind on or near full, partially full or empty product containers.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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 (PEL, TLV, REL, ect.) they must use appropriate certified respirators. NIOSH-certified air-purifying respirators equipped with an organic vapor sorbent and particulate filter can be used as long as appropriate precautions and change out schedules are in place.

EYE PROTECTION: Wear safety glasses and a face shield or chemical goggles.

SKIN PROTECTION: Wear protective gloves and clothing to prevent all skin contact. Suitable glove materials may include, chloroprene rubber (Neoprene), nitrile rubber (Buna N), chlorinated polyethylene, polyvinylchloride (Pylox), butyl rubber, depending upon conditions of use. Remove contaminated clothing immediately and clean before re-use or dispose it if necessary.

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 eyes and skin.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE & ODOR:	Black liquid with a faint polyol odor.		
FLASH POINT:	> 392 °F	LOWER EXPLOSIVE LIMIT:	No Data
METHOD USED:	Open cup	UPPER EXPLOSIVE LIMIT:	No Data
EVAPORATION RATE:	No Data	BOILING POINT:	>284 °F
IGNITION TEMPERATURE:	>800 °F	MELTING POINT:	32 °F
SOLUBILITY IN WATER:	Partly	SPECIFIC GRAVITY:	1.02
VAPOR DENSITY:	Not Applicable	PERCENT VOLATILE:	No Data
VAPOR PRESSURE:	0 mm Hg	MOLECULAR WEIGHT:	No Data
VOC (G/L):	<5	SPECIFIC GRAVITY (LBS/GAL):	No Data

SECTION 10: STABILITY AND REACTIVITY

THERMAL STABILITY:

STABLE UNSTABLE

CONDITIONS TO AVOID (STABILITY):

Temperatures below 32° F. The product is stable if stored and handled as prescribed/indicated in section 7.

INCOMPATIBILITY (MATERIAL TO AVOID):

Acids, oxidizing agents, isocyanates.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:

None known.

HAZARDOUS POLYMERIZATION:

No hazardous reactions if stored and handled as prescribed/indicated.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

11.2 Acute Toxicity/Effects

Assessment of acute toxicity: No known acute effects.

Assessment other acute effects/ STOT single: Based on available information there is no specific organ toxicity to be expected after a single exposure.

Irritation / corrosion: Assessment of irritating effects: No irritation is expected under intended use and appropriate handling.

Information on: *Stannane, dibutylbis(dodecylthio)-*

Assessment of irritating effects: *Not irritating to eyes and skin.*

Assessment of sensitization: Sensitization after skin contact possible.

Information on: *Stannane, dibutylbis(dodecylthio)-*

Assessment of sensitization: *sensitizing effect in animal tests.*

Aspiration Hazard: No aspiration hazard expected.

11.3 Chronic Toxicity/Effects

Assessment of repeated dose toxicity: Repeated exposure may affect certain organs. Repeated exposure to small quantities may affect certain organs.

Information on: *diethylene glycol*

The substance may cause damage to the kidney after repeated ingestion of high doses, as shown in animal studies. The effects were only observed at doses/concentrations not relevant for classification and/or practical use conditions. These effects are not relevant to humans at occupational levels of exposure. The substance may cause damage to the liver after repeated ingestion.

Information on: *Stannane, dibutylbis(dodecylthio)-*

Assessment of repeated dose toxicity: Repeated exposure to small quantities may affect certain organs.

Genetic toxicity: Mutagenic properties cannot be excluded on the basis of experimental data.

Information on: *Stannane, dibutylbis(dodecylthio)-*

Mutagenic properties cannot be excluded on the basis of experimental data.

Carcinogenicity: The chemical structure does not suggest a specific alert for such an effect. No applicable information available.

Reproductive toxicity: Causes impairment of fertility in laboratory animals.

Information on: *Stannane, dibutylbis(dodecylthio)-*

Causes impairment of fertility in laboratory animals. The results of animal studies suggest a fertility impairing effect.

Teratogenicity: The substance caused malformations/developmental toxicity in laboratory animals.

Information on: *Stannane, dibutylbis(dodecylthio)-*

No data available.

Other Information: The product has not been tested. The statement has been derived from the properties of the individual components.

Medical conditions aggravated by overexposure

Individuals with allergic history or pre-existing dermatitis should use extra precautions when handling this product. The substance may cause sensitization of the skin in particularly sensitive individuals.

SECTION 12: ECOLOGICAL INFORMATION

Aquatic toxicity: There is a high probability that the product is not acutely harmful to aquatic organisms. The product has not been tested. The statement has been derived from the properties of the individual components.

Persistence and degradability: Poorly biodegradable.

Bioaccumulative potential: Significant accumulation in organisms is not to be expected.

Mobility in soil: Adsorption to solid soil phase is not expected.

Additional Information: Adsorbable organically-bound halogen(AOX): This product contains no organically-bound halogen.

Other ecotoxicological advice: The product has not been tested. Do not discharge product into the environment without control

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Dispose of in a licensed facility according to federal, state, and local hazardous waste regulations. Do not discharge chemical into sewer system or allow to contaminate soil.

Disposal of empty container/canister/cylinder/tanks and dispense gun:

1. Discharge canisters with included dispense gun and mix tip as foam completely into a waste container until one canister is empty of material.
2. Remove dispense gun manifold and discharge residual chemical into a sealed waste container (ie: plastic bucket) until residual chemical and gas are evacuated and both canisters are depressurized.
3. Dispose of empty canisters, dispense gun, and hoses according to federal, state, and local regulations for the treatment of hazardous and nonhazardous wastes. Consult your local waste disposal service for guidance.
4. Dispose of captured residual chemical in a licensed facility according to applicable federal, state, and local regulations. Do not discharge chemical into sewer system or allow to contaminate soil.

SECTION 14: TRANSPORTATION INFORMATION

DOT

Hazard class: 2.2
 ID number: UN 3500
 Hazard label: 2.2
 Proper shipping name: CHEMICAL UNDER PRESSURE, N.O.S. (contains TRANS-1,3,3,3-TETRAFLUOROPROP-1-ENE, NITROGEN)

IATA

Hazard class: 2.2
 ID number: UN 3500
 Hazard label: 2.2
 Proper shipping name: CHEMICAL UNDER PRESSURE, N.O.S. (contains TRANS-1,3,3,3-TETRAFLUOROPROP-1-ENE, NITROGEN)

IMDG

Hazard class: 2.2
 ID number: UN 3500
 Hazard label: 2.2
 Marine pollutant: NO
 Proper shipping name: CHEMICAL UNDER PRESSURE, N.O.S. (contains TRANS-1,3,3,3-TETRAFLUOROPROP-1-ENE, NITROGEN)

SECTION 15: REGULATORY INFORMATION**15.1 Federal Regulations****Registration status:**

Chemical TSCA, US released / listed

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

EPCRA 311/312 (Hazard categories): Refer to SDS section 2 for GHS hazard classes applicable for this product.

15.2 State regulations

State RTK	CAS Number	Chemical name
PA	111-46-6	diethylene glycol

NFPA Hazard codes:

Health: 2 Fire: 1 Reactivity: 1 Special:

HMIS III rating:

Health: 2* Flammability: 1 Physical hazard: 1

CALIFORNIA PROP. 65: WARNING: This product can expose you to chemicals including TOLUENE, which is known to the State of California to cause birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.

SECTION 16: OTHER INFORMATION

ADDITIONAL COMMENTS: None

DATE OF PREVIOUS SDS: March 2020

CHANGES SINCE PREVIOUS SDS: Ingredient Change

This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief accurate and reliable as of the date compiled. However, no representation, warranty or guarantee, expressed or implied, is made as to its accuracy, reliability, or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information

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