Section 1 - PRODUCT AND COMPANY IDENTIFICATION

Material Name

GAF LRF Adhesive XF Part B

Synonyms
Urethane System Resin Component

Chemical Family
Resin

Product Use
Polyurethane Component

Manufacturer Information:
GAF
1 Campus Drive
Parsippany, NJ 07054, USA

Phone: 800-766-3411
Emergency Phone #:
CHEMTREC: 800-424-9300

Section 2 - HAZARDS IDENTIFICATION

Classification of the product

Press. Gas	Compr. Gas	Gases Under Pressure
STOT RE	2 (oral)	Specific target organ toxicity-repeated exposure
Simple Asphyxiant	Simple Asphyxiant (1)	Simple Asphyxiant

GHS Label Elements

Symbol(s)

Signal Word
Warning

Hazard Statement(s)
Contains gas under pressure; may explode if heated. May displace oxygen and cause rapid suffocation.

May cause damage to organs (Kidney) through prolonged or repeated exposure (oral).

Precautionary Statement(s)

Prevention
Do not breathe dust/gas/mist/vapors.

Response
Get medical advice/attention if you feel unwell.

Storage
P410 + P403 Protect from sunlight. Store in well-ventilated place.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR 1910.1200

CAS Number	Weight %	Chemical Name
811-97-2	> = 10.0 - < 15.0%	HFC-134A
111-46-6	> = 1.0 - < 3.0%	diethylene glycol
280-57-9	> = 0.3 - < 1.0%	triethylenediamine
25265-71-8	> = 1.0 - < 3.0%	dipropylene glycol

The product contains:

CAS Number	Weight %	Chemical Name
7727-37-9	> = 0.0 - < 1.0%	Nitrogen, used for cylinder pressurization only.

Section 4 - FIRST AID MEASURES

Description of first aid measures

General advice:
Remove contaminated clothing.

If Inhaled:
Keep patient calm, remove to fresh air, seek medical attention.

If on skin:
Wash thoroughly with soap and water.

If in eyes:
Wash affected eyes for at least 15 minutes under running water with eyelids held open.

If swallowed:
Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention. Do not induce vomiting.

Most important symptoms and effects, both acute and delayed

Symptoms: The most important know symptoms and effects are described in the labeling (see section 2) and/or in section 11.

Hazards: No hazards anticipated.

Indication of any immediate medical attention and special treatment needed

Note to physician
Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

Section 5 - FIRE FIGHTING MEASURES

Extinguishing media
Suitable extinguishing media: water spray, dry powder, carbon dioxide, foam

Special hazards arising from substance or mixture:
Hazards during fire-fighting: No particular hazards known.

Advice for fire-fighters
Protective equipment for fire-fighting: Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:
Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Section 6 - ACCIDENTAL RELEASE MEASURES

Further accidental release measures:
High risk of slipping due to leakage/spillage of product.

Personal Precautions, Protective Equipment and Emergency Procedures
Use personal protective clothing.

Environmental Precautions Do not empty into drains. Do not discharge into the subsoil/soil.

Section 7 - HANDLING AND STORAGE

Precautions for Safe Handling
Ensure thorough ventilation of stores and work areas. Protect against moisture.

Protection against fire and explosion: No explosion proofing necessary.

Conditions for Safe Storage, Including any Incompatibilities
Segregate from foods and animal feeds. Segregate from acids. Segregate from oxidants.

Suitable materials for containers: Carbon steel (Iron), High density polyethylene (HDPE), Low density polyethylene (LDPE), Stainless steel 1.4301 (V2)

Further information on storage conditions: No special precautions necessary. Avoid extreme heat. Store protected against freezing.

Storage stability:
Storage temperature: 16 - 27 °C

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

No occupational exposure limits known.

Advice on system design:

Provide local exhaust ventilation to control vapors/mists.

Personal protective equipment

Respiratory protection:
Wear a NIOSH-certified (or equivalent) organic vapor/particulate respirator as needed.

Hand protection:
Chemical resistant protective gloves.

Eye protection:
Wear face shield or tightly fitting goggles (chemical goggles) if splashing hazard exits.

Body protection:
Standard work clothes and shoes.

General safety and hygiene measures
Avoid contact with skin. Handle in accordance with good industrial hygiene and safety practice. Wear protective clothing as necessary to prevent contact. Avoid inhalation of vapours/mists. Wash soiled clothing immediately.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Form:	Liquid
Odour:	Amine-like
Odour threshold:	No applicable information available.
Colour:	Clear
pH value:	>= 7.0
Freezing point:	> 0.00 °C
Boiling point:	> 100.00 °C
Sublimation point:	No applicable information available. >
Flash point:	200.00 °F
Flammability:	Not flammable
Lower explosion limit:	For liquids not relevant for classification and labelling. The lower explosion point may be 5 - 15 °C below the flash point.
Upper explosion limit:	For liquids not relevant for classification and labelling.
Autoignition:	> 250 °C
Vapor pressure:	< 0.1 hPa (25 °C)
Density:	1.0010 - 1.0040 g/cm3 (20.00 °C)
Relative density:	No applicable information available.
Vapor density:	No applicable information available.
Partitioning coefficient n-octanol/water (log Pow):	Unspecified
Self-ignition temperature:	Not self-igniting
Thermal decomposition:	No decomposition if stored and handled as prescribed/indicated.
Viscosity, dynamic:	420.000 mPa.s (23.00 °C)
Viscosity, kinematic:	No applicable information available.
Solubility in water:	Slightly soluble.
Solubility (quantitative):	No applicable information available.
Solubility (qualitative):	No applicable information available.
Evaporation rate:	Value can be approximated from Henry's Law Constant or vapor pressure.

Other Information
If necessary, information on other physical and chemical parameters is indicated in this section.

Section 10 - STABILITY AND REACTIVITY

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

Corrosion to metals:
No corrosive effect on metal expected.

Oxidizing properties:
Not an oxidizer.

Chemical Stability
The product is stable if stored and handled as prescribed/indicated.

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

Conditions to avoid
Temperature: < 0 degrees Celsius

Incompatible materials
Acids, oxidizing agents, isocyanates

Hazardous decomposition products
Decomposition products
Hazardous decomposition products: carbon monoxide, carbon dioxide,
nitrogen oxide, hydrogen cyanide

Thermal decomposition:
No decomposition if stored and handled as prescribed/indicated.

Section 11 - TOXICOLOGICAL INFORMATION

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.

Acute Toxicity/Effects

Acute toxicity
Assessment of acute toxicity: No known acute effects.

Oral
No applicable information available.

Inhalation
No applicable information available.

Dermal
No applicable information available.

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

Origin of data: expert judgement

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

Sensitization
Assessment of sensitization: The chemical structure does not suggest a sensitizing effect. No applicable information available.

Aspiration Hazard
No aspiration hazard expected.

Chronic Toxicity/Effects

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

Genetic toxicity
Assessment of mutagenicity: The chemical structure does not suggest a specific alert for such an effect. No applicable information available.

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

Reproductive toxicity
Assessment of reproduction toxicity: The chemical structure does not suggest a specific alert for such an effect. No applicable information available.

Teratogenicity
Assessment of teratogenicity: The chemical structure does not suggest a specific alert for such an effect. No applicable information available.

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

Symptoms of Exposure
The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Medical conditions aggravated by overexposure
Data available do not indicate that there are medical conditions that are generally recognized as being aggravated by exposure to this substance/product.

Section 12 - ECOLOGICAL INFORMATION

Toxicity
Aquatic toxicity
Assessment of 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
Assessment biodegradation and elimination (H2O)
Poorly biodegradable.

Elimination information
Poorly biodegradable.

Bioaccumulative Potential
Assessment bioaccumulation potential
Does not significantly accumulate in organisms.

Mobility in soil
Assessment transport between environmental compartments
Adsorption to solid soil phase is not expected.

Additional information
Absorbable 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 of substance:
Incinerate in a licensed facility. Dispose of in a licensed facility. Do not discharge substance/product into sewer system. Follow all federal, state and local regulations.

Section 14 - TRANSPORT INFORMATION

Containers Greater Than 100 cu. Cm. (1 liter)
Ground - UN3500 chemical Under Pressure n.o.s. (Fluorinated hydrocarbon, nitrogen)
2.2 (Non-Flammable Gas Label)

Air - UN3500 chemical Under Pressure n.o.s. (Fluorinated hydrocarbon, nitrogen)
2.2 (Non-Flammable Gas Label)

Water - UN3500 chemical Under Pressure n.o.s. (Fluorinated hydrocarbon, nitrogen)
2.2 (Non-Flammable Gas Label)

Section 15 - REGULATORY INFORMATION

Federal Regulations

Registration status:
Chemical TSCA, US released / listed

EPCRA 311/312 (Hazard categories): Acute; Chronic, Sudden release of pressure

State regulations

State RTK	CAS Number	Chemical Name
PA	111-46-6	diethylene glycol
	25265-71-8	dipropylene glycol

CA Prop. 65:
None

NFPA Hazard codes:
Health: 1 Fire: 1 Reactivity: 1 Special:

HMIS III rating:
Health: 1¤ Flammability: 1 Physical hazard: 1

Section 16 - OTHER INFORMATION

ADDITIONAL COMMENTS:	None
DATE OF PREVIOUS SDS:	Not Applicable – New Product.
CHANGES SINCE PREVIOUS SDS:	Not Applicable – New Product.

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