









**GAF**  
**Safety Data Sheet**  
**SDS # 4036**  
**SDS Date: December 2022**

**SECTION 1: PRODUCT AND COMPANY INFORMATION**

**PRODUCT NAME:** LRF Adhesive XF Canister Part A  
**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
	2		2
	1		1
	1		1
Special Hazards	-	Personal Protection	X

**GHS LABEL ELEMENTS:**

Acute Toxicity	4
Eye Irritation	2B
Skin Irritation	2
Skin Sensitization	1B
Respiratory Sensitization	1
Specific Target Organ Toxicity	3 single 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 (olfactory organs) through prolonged or repeated exposure (inhalation).  
Causes skin irritation.  
Causes eye irritation.  
May cause an allergic reaction.  
May cause respiratory irritation.  
May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
Harmful if inhaled.

**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.

**Hazards not otherwise classified**

Labeling of special preparations (GHS):

CONTAINS ISOCYANATES. INHALATION OF ISOCYANATE MISTS OR VAPORS MAY CAUSE RESPIRATORY IRRITATION, BREATHELESSNESS, CHEST DISCOMFORT AND REDUCED PULMONARY FUNCTION. OVEREXPOSURE WELL ABOVE THE PEL MAY RESULT IN BRONCHITIS, BRONCHIAL SPASMS AND PULMONARY EDEMA. LONG-TERM EXPOSURE TO ISOCYANATES HAS BEEN REPORTED TO CAUSE LUNG DAMAGE, INCLUDING REDUCED LUNG FUNCTION WHICH MAY BE PERMANENT. ACUTE OR CHRONIC OVEREXPOSURE TO ISOCYANATES MAY CAUSE SENSITIZATION IN SOME INDIVIDUALS, RESULTING IN ALLERGIC RESPIRATORY REACTIONS INCLUDING WHEEZING, SHORTNESS OF BREATH AND DIFFICULTY BREATHING. ANIMAL TESTS INDICATE THAT SKIN CONTACT MAY PLAY A ROLE IN CAUSING RESPIRATORY SENSITIZATION.

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**ADDITIONAL HAZARD IDENTIFICATION INFORMATION:**

**SIGNS & SYMPTOMS OF EXPOSURE**

<b>EYES:</b>	This product is irritating to the eyes.
<b>SKIN:</b>	This product is irritating to the skin. This product may cause an allergic skin reaction.
<b>INGESTION:</b>	This product is not expected to be ingested. However, ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea.
<b>INHALATION:</b>	Allergic lung reaction such as asthma, which includes coughing, wheezing, chest pain and tightness, difficulty breathing and shortness of breath.
<b>ACUTE HEALTH HAZARDS:</b>	See above.
<b>CHRONIC HEALTH HAZARDS:</b>	Repeated inhalation and skin contact exposures may cause sensitization.
<b>CARCINOGENICITY:</b>	None known.

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

CHEMICAL NAME	CAS #	% (BY WT)	OCCUPATIONAL EXPOSURE LIMITS		
			OSHA	ACGIH	OTHER
Diphenylmethane diisocyanate, isomers and homologues	9016-87-9	25 - 75	0.02 ppm	0.005 ppm	NE
Diphenylmethane-4,4'-diisocyanate (MDI)	101-68-8	25 - 50	0.02 ppm - ceiling	0.005 ppm	0.005 ppm; 0.02 ppm - ceiling (10 min.)
Methylenediphenyl diisocyanate	26447-40-5	3 - 7	NE	NE	NE
Isocyanic acid, polymethylenepolyphenylene ester, polymer with.alpha.-hydro-omega-hydroxypoly(oxy-1,2-ethanediyl)	57636-09-6	1 - 3	NE	NE	NE
1,3-Diazetidone-2,4-dione, 1,3-bis[4-(4-isocyanatophenyl)methyl]phenyl]-	17589-24-1	0.3 - 3	NE	NE	NE
Trans-1,3,3,3-Tetrafluoroprop-1-ene	29118-24-9	3 - 7	NE	NE	NE
Nitrogen	7727-37-9	0 - 1	NE	NE	NE

**NE = Not Established**

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**SECTION 4: FIRST AID MEASURES**

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**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 to isocyanates do not exist. Treatment should be supportive and based on the judgement of the physician in response to the reaction of the patient.

**Information on: Diphenylmethane-4,4'-diisocyanate (MDI)**

**Symptoms:** Overexposure may cause: Eye irritation, skin irritation, erythema, chest discomfort, dyspnea, asthma, nausea, headache, vomiting, dizziness, diarrhea, abdominal cramps, Inhalation may provoke the following symptoms: irritation of respiratory tract, coughing, wheezing

**Hazards:** Respiratory sensitization may result in allergic (asthma-like) signs in the lower respiratory tract including wheezing, shortness of breath and difficulty breathing, the onset of which may be delayed. Repeated inhalation of high concentrations may cause lung damage, including reduced lung function, which may be permanent. Substances eliciting lower respiratory tract irritation may worsen the asthma-like reactions that may be produced by product exposures.

**Additional Hazards:** Symptoms can appear later.

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**SECTION 5: FIRE FIGHTING PROCEDURES**

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- SUITABLE EXTINGUISHING MEDIA:** Water spray, carbon dioxide, or dry chemical. Fight larger fires with water spray. Use fire fighting measures that suit the environment.
- HAZARDOUS COMBUSTION PRODUCTS:** Carbon dioxide, carbon monoxide, oxides of nitrogen, dense black smoke, hydrogen cyanide, isocyanic acid, 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.

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**SECTION 6: ACCIDENTAL RELEASE MEASURES**

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**ACCIDENTAL RELEASE MEASURES:** **For small amounts:** Absorb isocyanate with suitable absorbent material (see § 40 CFR, sections 260, 264 and 265 for further information). Shovel into open container. Spill area can be decontaminated with the following recommended decontamination solution: Mixture of 90 % water, 5-8 % household ammonia, 2-5 % detergent. Allow solution to stand for at least 10 minutes. Pick up with suitable absorbent material. Place into appropriately labeled waste containers. Do not make container pressure tight. Move container to a well-ventilated area (outside). Allow to stand for at least 48 hours to allow escape of evolved carbon dioxide. Dispose of absorbed material in accordance with regulations.

**For large amounts:** For spills, stop leaks and provide diking to contain the material. Prevent entry into sewage systems, ground and surface waters. If temporary control of isocyanate vapor is required, a blanket of protein foam or other suitable foam (available from most fire departments) may be placed over the spill. Transfer as much liquid as possible via pump or vacuum device into closed but not sealed containers for disposal.

**For residues:** The following measures should be taken for final cleanup: Spill area can be decontaminated with the following recommended decontamination solution: Mixture of 90 % water, 5-8 % household ammonia, 2-5 % detergent. Wash down spill area with decontamination solution. Allow solution to stand for at least 10 minutes. Pick up with suitable absorbent material. Place into appropriately labeled waste containers. Do not make container pressure tight. Move container to a well-ventilated area (outside). Allow to stand for at least 48 hours to allow escape of evolved carbon dioxide. Dispose of absorbed material in accordance with regulations.

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**SECTION 7: HANDLING AND STORAGE**

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**HANDLING AND STORAGE:** 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.

**Protection against fire and explosion:** No special precautions necessary. Contents under pressure. Extreme temperatures (>170° F) can cause cylinders to rupture or explode

**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.

**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:

Use a NIOSH-approved respirator to protect against inhalation of vapors. A respirator should be used if ventilation is unavailable, or is inadequate for keeping vapor levels below the applicable exposure limits. Consult the respirator manufacturer to determine the appropriate type of equipment for a given application.

### 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

<b>APPEARANCE &amp; ODOR:</b>	Amber liquid with a faint aromatic odor.		
<b>FLASH POINT:</b>	> 392 °F	<b>LOWER EXPLOSIVE LIMIT:</b>	No Data
<b>METHOD USED:</b>	Open cup	<b>UPPER EXPLOSIVE LIMIT:</b>	No Data
<b>EVAPORATION RATE:</b>	No Data	<b>BOILING POINT:</b>	392 °F
<b>IGNITION TEMPERATURE:</b>	>800 °F	<b>MELTING POINT:</b>	>-2.0 °F
<b>SOLUBILITY IN WATER:</b>	Reacts with water	<b>SPECIFIC GRAVITY:</b>	1.22
<b>VAPOR DENSITY:</b>	Not Applicable	<b>PERCENT VOLATILE:</b>	No Data
<b>VAPOR PRESSURE:</b>	0 mm Hg	<b>MOLECULAR WEIGHT:</b>	No Data
<b>VOC (G/L):</b>	<5	<b>SPECIFIC GRAVITY (LBS/GAL):</b>	No Data

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

Contact with moisture. The product is stable if stored and handled as prescribed/indicated in section 7.

**INCOMPATIBILITY (MATERIAL TO AVOID):**

Reacts with water, with formation of carbon dioxide. Reacts with alcohols. Reacts with acids. Reacts with alkalies. Reacts with amines. Risk of exothermic reaction. Risk of polymerization. Contact with certain rubbers and plastics can cause brittleness of the substance/product with subsequent loss in strength.

**HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:**

Hazardous decomposition products: carbon monoxide, carbon dioxide, hydrogen cyanide, nitrogen oxides, aromatic isocyanates, gases/vapors

**HAZARDOUS POLYMERIZATION:**

Risk of polymerization.

**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:** Of moderate toxicity after short-term inhalation. Inhalation of vapors may cause irritation of the mucous membranes of the nose, throat or trachea, breathlessness, chest discomfort, difficult breathing and reduced pulmonary function. Inhalation exposure well above the PEL may result additionally in eye irritation, headache, chemical bronchitis, asthma-like findings or pulmonary edema. Isocyanates have also been reported to cause hypersensitivity pneumonitis, which is characterized by flu-like symptoms, the onset of which may be delayed.

Acute Toxicity Test Information on: Diphenylmethane-4,4'-diisocyanate (MDI)					
Test	Type of Value	Species	Value	Exposure Time	Notes
Oral	LD50	rat (male/female)	> 2000mg/kg (Directive 84/449/EEC, B.1)		
Inhalation	ATE	rat	1.96 mg/l (OECD Guideline 403)	4 hours	An aerosol was tested
	LC50	rat	2.24 mg/l (OECD Guideline 403)	1 hour	An aerosol was tested
Dermal	LD50	rabbit (male/female)	> 9400 mg/kg		

**Assessment other acute effects/ STOT single:** Causes temporary irritation of the respiratory tract.**Irritation / corrosion:** Assessment of irritating effects: Irritating to eyes, respiratory system and skin. Skin contact may result in dermatitis, either irritative or allergic. Overexposure to the eyes may cause irritation,

redness, scratching of the cornea, and tearing. Repeated or prolonged skin contact can cause drying and cracking of the skin.

**Assessment of sensitization:** Sensitization after skin contact possible. The substance may cause sensitization of the respiratory tract. As a result of previous repeated overexposures or a single large dose, certain individuals will develop isocyanate sensitization (chemical asthma) which will cause them to react to a later exposure to isocyanate at levels well below the PEL/TLV. These symptoms, which include chest tightness, wheezing, cough, shortness of breath, or asthmatic attack, could be immediate or delayed up to several hours after exposure. Similar to many non-specific asthmatic responses, there are reports that once sensitized an individual can experience these symptoms upon exposure to dust, cold air, or other irritants. This increased lung sensitivity can persist for weeks and in severe cases for several years. Chronic overexposure to isocyanates has also been reported to cause lung damage, including a decrease in lung function, which may be permanent. Prolonged contact can cause reddening, swelling, rash, scaling, or blistering. In those who have developed a skin sensitization, these symptoms can develop as a result of contact with very small amounts of liquid material, or even as a result of vapor-only exposure. Animal tests indicate that skin contact may play a role in causing respiratory sensitization. Studies in animals suggest that dermal exposure may lead to pulmonary sensitization. However, the relevance of this result for humans is unclear.

**Aspiration Hazard:** No aspiration hazard expected.

### **11.3 Chronic Toxicity/Effects**

**Assessment of repeated dose toxicity:** The substance may cause damage to the olfactory epithelium after repeated inhalation. The substance may cause damage to the lung after repeated inhalation. These effects are not relevant to humans at recommended occupational levels of exposure.

*Information on: Diphenylmethane-4,4'-diisocyanate (MDI)*

*Experimental/calculated data: similar to OECD guideline 453 rat (Wistar) (male/female) Inhalation 2 yrs, 6 hr/day 0, 0.2, 1, 6 mg/m<sup>3</sup>, olfactory epithelium*

*NOAEL: 0.2 mg/m<sup>3</sup>*

*LOAEL: 1 mg/m<sup>3</sup>*

*The substance may cause damage to the olfactory epithelium after repeated inhalation. These effects are not relevant to humans at occupational levels of exposure. Repeated inhalative uptake of the substance did not cause damage to the reproductive organs.*

**Genetic toxicity:** The substance was mutagenic in various bacterial test systems; however, these results could not be confirmed in tests with mammals.

*Information on: Diphenylmethane-4,4'-diisocyanate (MDI)*

*Genetic toxicity in vitro: OECD Guideline 471 Ames-test Salmonella typhimurium: with and without metabolic activation ambiguous*

*Information on: Diphenylmethane-4,4'-diisocyanate (MDI)*

*Genetic toxicity in vivo: OECD Guideline 474 Micronucleus assay rat (male) Inhalation negative No clastogenic effect reported.*

**Carcinogenicity:** A carcinogenic potential cannot be excluded after prolonged exposure to severely irritating concentrations. These effects are not relevant to humans at occupational levels of exposure. IARC Group 3 (not classifiable as to human carcinogenicity).

*Information on: Diphenylmethane-4,4'-diisocyanate (MDI)*

*Assessment of carcinogenicity: A carcinogenic potential cannot be excluded after prolonged exposure to severely irritating concentrations. These effects are not relevant to humans at occupational levels of exposure. IARC Group 3 (not classifiable as to human carcinogenicity).*



*Information on: Methylenediphenyl diisocyanate*

*Assessment of carcinogenicity: A carcinogenic potential cannot be excluded after prolonged exposure to severely irritating concentrations. These effects are not relevant to humans at occupational levels of exposure. IARC Group 3 (not classifiable as to human carcinogenicity).*

*Information on: 1,3-Diazetidone-2,4-dione, 1,3-bis[4-[(4-isocyanatophenyl)methyl]phenyl]- Assessment of carcinogenicity: Indication of possible carcinogenic effect in animal tests. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.*

*Experimental/calculated data: OECD Guideline 453 rat Inhalation 0, 0.2, 1, 6 mg/m<sup>3</sup> Result: Lung tumors*

**Reproductive toxicity:** Repeated inhalative uptake of the substance did not cause damage to the reproductive organs.

**Teratogenicity:** The substance did not cause malformations in animal studies; however, toxicity to development was observed at high doses that were toxic to the parental animals.

**Development:** OECD Guideline 414 rat Inhalation 0, 1, 4, 12 mg/m<sup>3</sup> NOAEL Mat.: 4 mg/m<sup>3</sup>  
NOAEL Teratog.: 4 mg/m<sup>3</sup>

The substance did not cause malformations in animal studies; however, toxicity to development was observed at high doses that were toxic to the parental animals.

**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**

The isocyanate component is a respiratory sensitizer. It may cause allergic reaction leading to asthma-like spasms of the bronchial tubes and difficulty in breathing. Medical supervision of all employees who handle or come into contact with isocyanates is recommended. Contact may aggravate pulmonary disorders. Persons with history of respiratory disease or hypersensitivity should not be exposed to this product. Preemployment and periodic medical examinations with respiratory function tests (FEV<sub>1</sub>, FVC as a minimum) are suggested. Persons with asthmatic conditions, chronic bronchitis, other chronic respiratory diseases, recurrent eczema or pulmonary sensitization should be excluded from working with isocyanates. Once a person is diagnosed as having pulmonary sensitization (allergic asthma) to isocyanates, further exposure is not recommended.

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## **SECTION 12: ECOLOGICAL INFORMATION**

**Aquatic toxicity:** There is a high probability that the product is not acutely harmful to aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations. Based on long-term (chronic) toxicity study data, the product is very likely not harmful to aquatic organisms.

The product may hydrolyse. The test result maybe partially due to degradation products. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

*Toxicity to fish: LC<sub>0</sub> (96 h) > 1,000 mg/l, Brachydanio rerio (OECD Guideline 203, static)*

*Aquatic invertebrates: EC<sub>50</sub> (24 h) > 1,000 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)*

*Aquatic plants: EC<sub>0</sub> (72 h) 1,640 mg/l (growth rate), Scenedesmus subspicatus (OECD Guideline 201, static)*

**Microorganisms/Effect on activated sludge:**

*Toxicity to microorganisms: OECD Guideline 209 aquatic aerobic bacteria from a domestic water treatment plant/EC50 (3 h): > 100 mg/l*

**Persistence and degradability:** Poorly biodegradable. The product is unstable in water. The elimination data also refer to products of hydrolysis.

**Assessment of stability in water:** In contact with water the substance will hydrolyse slowly.

*Information on Stability in Water (Hydrolysis): t1/2 20 h (25 °C)*

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

*Bioconcentration factor: 200 (28 d), Cyprinus carpio (OECD Guideline 305 E)*

**Mobility in soil:** The substance will not evaporate into the atmosphere from the water surface. Adsorption to solid soil phase is not expected.

## 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.

**EPCRA 313:**

<u>CAS Number</u>	<u>Chemical name</u>
101-68-8	Diphenylmethane-4,4'-diisocyanate (MDI)
9016-87-9	P-MDI

<u>CERCLA RQ</u>	<u>CAS Number</u>	<u>Chemical name</u>
5000 LBS	101-68-8; 9016-87-9	Diphenylmethane-4,4'-diisocyanate (MDI); P-MDI

**15.2 State regulations**

<u>State RTK</u>	<u>CAS Number</u>	<u>Chemical name</u>
PA	101-68-8	Diphenylmethane-4,4'-diisocyanate (MDI)
NJ	101-68-8	Diphenylmethane-4,4'-diisocyanate (MDI)

**NFPA Hazard codes:**

Health: 2      Fire: 1      Reactivity: 1      Special:

**HMIS III rating:**

Health: 2\*      Flammability: 1      Physical hazard: 1

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

**SECTION 16: OTHER INFORMATION**

**ADDITIONAL COMMENTS:** None

**DATE OF PREVIOUS SDS:** November 2021

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CHANGES SINCE PREVIOUS SDS:   Ingredient Change

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**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 for his particular use. We do not accept liability for any loss or damage that may occur from the use of this information. Nothing herein shall be construed as a recommendation for uses which infringe valid patents or as extending a license of valid patents.**