GAF
Safety Data Sheet
SDS # 2147
SDS Date: September 2016

SECTION 1: PRODUCT AND COMPANY INFORMATION

PRODUCT NAME:	LRF Adhesive M Part A
TRADE NAME:	N/A
CHEMICAL NAME / SYNONYM:	N/A
CHEMICAL FAMILY:	N/A
MANUFACTURER:	GAF
ADDRESS:	1 Campus Drive, Parsippany, NJ 07054
24 HOUR EMERGENCY PHONE: (CHEMTREC)	800–424–9300
INFORMATION ONLY:	800–766–3411
PREPARED BY:	Corporate EHS
APPROVED BY:	Corporate EHS

SECTION 2: HAZARDS IDENTIFICATION

NFPA and HMIS RATINGS:

	NFPA Hazard Rating		HMIS Hazard Rating
Health	2	**Health**	2
Flammable	*1*	***Flammable***	*1*
Reactive	1	**Reactive**	1
Special Hazards	-	**Personal Protection**	X

GHS LABEL ELEMENTS:

GHS CLASSIFICATION:

Target Organ (SE) - Category 3
Target Organ (RE) - Category 2
Carcinogen - Category 2
Acute Toxicity - Category 2
Skin Irritant - Category 2
Skin Sensitizer - Category 1
Respiratory Irritant
Eye Irritant - Category 2

GHS PICTOGRAMS:

SIGNAL WORD: Warning

HAZARD STATEMENTS:

May cause damage to organs through prolonged or repeated exposure
Causes skin irritation
Causes serious eye irritation
May cause an allergic reaction
May cause respiratory irritation
May cause allergy or asthma symptoms or breathing difficulties if inhaled
Suspected of causing cancer
Repeated exposure may cause skin dryness and cracking
Harmful if inhaled

ADDITIONAL HAZARD IDENTIFICATION INFORMATION:

PRIMARY ROUTE OF EXPOSURE: Inhalation, Skin Contact, Eye Contact

SIGNS & SYMPTONS OF EXPOSURE

EYES: This product is irritating to the eyes. Symptoms include itching, burning, redness and tearing.

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. It may also cause irritation of the upper respiratory tract, which includes burning of mouth, throat and chest.

ACUTE HEALTH HAZARDS: See above.

CHRONIC HEALTH HAZARDS: Repeated inhalation and skin contact exposures may cause sentization.

CARCINOGENICITY: None known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

			OCCUPATIONAL EXPOSURE LIMITS		
CHEMICAL NAME	**CAS #**	**% (BY WT)**	**OSHA**	**ACGIH**	**OTHER**
Methylene Bisphenol Isocyanate (MDI)	101-68-8	30 – 60	0.02 ppm – ceiling	0.005 ppm	0.005 ppm; 0.02 ppm – ceiling (10 min.)
Polymethylene Polyphenylene Isocyanate	9016-87-9	30 – 60	NE	NE	NE

NE = Not Established

SECTION 4: FIRST AID MEASRURES

FIRST AID PROCEDURES

EYES: Immediately flush eyes with water for at least 15 minutes while holding eyelids open. 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. 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: None known.

SECTION 5: FIRE FIGHTING PROCEDURES

SUITABLE EXTINGUISHING MEDIA: Use appropriate methods for surrounding fire.

HAZARDOUS COMBUSTION PRODUCTS: Carbon monoxide, carbon dioxide, nitrogen oxides, hydrocarbons, HCN and isocyanates.

RECOMMENDED FIRE FIGHTING PROCEDURES: Firefighters should wear full protective clothing including self contained breathing apparatus.

UNUSUAL FIRE & EXPLOSION HAZARDS: Containers may burst if overheated. This product reacts with water producing carbon dioxide gas. Do not reseal contaminated containers as a hazardous pressure build up could result in container rupture.

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: Absorb spill with inert material. Ventilate the contaminated area. Shovel material into appropriate container for further neutralization and disposal. Evacuate the area promptly. Keep upwind of the spilled material and isolate exposure. Avoid inhalation of vapors and mists. Surfaces may become slippery after a spill. Wear PPE for spill clean up. Stop the flow of material, if possible. Do not allow to drain to sewers.

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: Keep containers properly sealed in a cool, dry, well ventilated area between 65 – 85 °F. Do not store in open, unlabeled or mislabeled containers.

OTHER PRECAUTIONS: Do not reuse empty containers without proper cleaning and reconditioning.

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 organic vapor 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.

EYE PROTECTION: Wear chemical goggles and add a face shield if splashing is possible.

SKIN PROTECTION: The use of neoprene, nitrile or butyl rubber gloves is recommended.

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.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE & ODOR:	Dark brown liquid with faint aromatic odor.		
FLASH POINT:	> 350 °F	**LOWER EXPLOSIVE LIMIT:**	No Data

METHOD USED:	Pensky-Martin CC	**UPPER EXPLOSIVE LIMIT:**	No Data
EVAPORATION RATE:	No Data	**BOILING POINT:**	No Data
pH (undiluted product):	No Data	**MELTING POINT:**	No Data
SOLUBILITY IN WATER:	Reacts with water	**SPECIFIC GRAVITY:**	1.22
VAPOR DENSITY:	No Data	**PERCENT VOLATILE:**	< 0.15
VAPOR PRESSURE:	No Data	**MOLECULAR WEIGHT:**	No Data
VOC WITH WATER (LBS/GAL):	No Data	**WITHOUT WATER (LBS/GAL):**	No Data

SECTION 10: STABILITY AND REACTIVITY

THERMAL STABILITY: **STABLE X** **UNSTABLE** ☐

CONDITIONS TO AVOID (STABILITY): Avoid high temperatures. Avoid contact with water. Avoid contamination. Avoid contact with metals such as aluminum, brass, copper, galvanized metals, tin and zinc.

INCOMPATIBILITY (MATERIAL TO AVOID): Water, alcohols, amines, bases and acids.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Carbon oxides, nitrogen oxides, hydrocarbons, HCN and isocyanates.

HAZARDOUS POLYMERIZATION: Polymerization will occur at elevated temperatures in the presence of alkalies, tertiary amines and metal compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION: Methylene Bisphenol Isocyanate (MDI)

Oral LD50 Rat: 9200 mg/kg

Polymethylene Polyphenylene Isocyanate

Inhalation LC50 Rat: 490 mg/m3 (4 hr)
Oral LD50 Rat: 49 g/kg
Dermal LD50 Rabbit: > 9400 mg/kg

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: No information available.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Wastes must be tested using methods described in 40 CFR 261 to determine if it meets applicable definitions of hazardous wastes. Comply with state and local regulations for disposal

RCRA HAZARD CLASS: N/A

SECTION 14: TRANSPORTATION INFORMATION

DOT
Not regulated as dangerous goods.

IATA
Not regulated as dangerous goods.

IMDG
Not regulated as dangerous goods.

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

TSCA: This product and its components are listed on the TSCA 8(b) inventory.

CERCLA: CERCLA Hazardous Substances (40 CFR 302)

Reportable Quantity – Components

Methylene Bisphenol Isocyanate (MDI): 101-68-8, 5000 lbs.

SARA

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

313 REPORTABLE INGREDIENTS: Methylene Bisphenol Isocyanate (MDI), 101-68-8, 30 – 60%
Polymethylene Polyphenylene Isocyanate, 9016-87-9, 30 – 60%

CALIFORNIA PROPOSITION 65: None.

Other state regulations may apply. Check individual state requirements. The following components appear on one or more of the following state hazardous substances lists:

Chemical Name	CAS #	CA	MA	MN	NJ	PA	RI

Methylene Bisphenol Isocyanate (MDI)	101-68-8	Yes	Yes	Yes	Yes	Yes	Yes
Polymethylene Polyphenylene Isocyanate	9016-87-9	Yes	Yes	Yes	Yes	Yes	Yes

SECTION 16: OTHER INFORMATION

ADDITIONAL COMMENTS: None

DATE OF PREVIOUS SDS: May 2015

CHANGES SINCE PREVIOUS SDS: Product Name Change

This information relates to the specific material designated and may not be valid for such material used on 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.