GAF
Safety Data Sheet
SDS # 2063B
SDS Date: December 2014

SECTION 1: PRODUCT AND COMPANY INFORMATION

PRODUCT NAME:	M-Thane (Part B)
TRADE NAME:	Pro Pack, Seal Pack, Flash Pack, Hardener
CHEMICAL NAME / SYNONYM:	N/A
CHEMICAL FAMILY:	Polymeric Isocyanate (Compounded)
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: HAZARD IDENTIFICATION

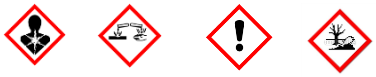
NFPA and HMIS RATINGS:

	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:

Eye Irritant - Category 2
Skin Irritant - Category 2
Skin Sensitizer - Category 1
Respiratory Irritant
Target Organ (SE) - Category 3
Target Organ (RE) - Category 2
Carcinogen - Category 2
Acute Toxicity - Category 2
Hazardous to the Aquatic Environment - Category 1

GHS PICTOGRAMS: 

SIGNAL WORD: Danger

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
Toxic to aquatic life

ADDITIONAL HAZARD IDENTIFICATION INFORMATION:

PRIMARY ROUTE OF EXPOSURE: Dermal contact, Skin absorption, Eye contact, Inhalation and Ingestion.

SIGNS & SYMPTOMS OF EXPOSURE

EYES: Liquid, aerosols or vapors are irritating and can cause tearing, reddening and swelling. If left untreated, corneal damage can occur and injury is slow to heal.

SKIN: Isocyanates react with skin protein and moisture and can cause irritation, which may include reddening, rash or blistering.

INGESTION: Can result in irritation and corrosive action in the mouth, stomach tissue and digestive tract. Symptoms can include sore throat, abdominal pains, nausea, vomiting and diarrhea.

INHALATION: Certain operations such as material heating may generate vapor or aerosol concentrations sufficient to cause irritation. Excessive exposure may irritate upper respiratory tract, causing sensitization in susceptible individuals. MDI concentrations below the exposure guidelines may cause allergic reactions to such persons. Symptoms include coughing, difficulty in breathing and a feeling of tightness in the chest. Such effects may be delayed.

ACUTE HEALTH HAZARDS: See signs and symptoms above.

CHRONIC HEALTH HAZARDS: Prolonged contact may cause skin and or respiratory sensitization.

CARCINOGENICITY: N/A

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

			OCCUPATIONAL EXPOSURE LIMITS		
CHEMICAL NAME	**CAS #**	**% (BY WT)**	**OSHA**	**ACGIH**	**OTHER**
4,4' Methylene Diphenyl Isocyanate (MDI)	101-68-8	55-80	.2mg/m3 Ceil	.051mg/m3	.05mg/m3
Polymeric Diphenylmethane Diisocyanate (MDI)	9016-87-9	20-45	NE	NE	NE

NE = Not Established

SECTION 4: FIRST AID MEASRURES

FIRST AID PROCEDURES

EYES: Irrigate with flowing water immediately and continuously for 15 minutes. Materials containing MDI may react with the moisture of the eye, forming a thick substance which may be difficult to wash from the eye.

SKIN: Remove contaminated clothing and wash contaminated area with soap and water.

INHALATION: Remove to fresh air. Give mouth-to-mouth resuscitation if not breathing. Administer oxygen for difficulty in breathing.

INGESTION: Do not induce vomiting. Consult a physician.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: None

SECTION 5: FIRE FIGHTING PROCEDURES

SUITABLE EXTINGUISHING MEDIA: Water Fog, Foam, CO2, and Dry Chemical.

HAZARDOUS COMBUSTION PRODUCTS: May form toxic materials such as carbon monoxide, carbon dioxide and MDI vapors.

RECOMMENDED FIRE FIGHTING PROCEDURES: Wear full protective clothing and NOISH approved self-contained breathing apparatus with full face piece, operated in positive pressure.

UNUSUAL FIRE & EXPLOSION HAZARDS: At temperatures greater than 400^{o}F, polymeric MDI can polymerize and decompose which can cause pressure build-up in closed containers. Explosive rupture is possible. Therefore,

use cold water to cool fire-exposed containers.

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: Ventilate the area and remove all ignition sources. Contain the spill by building a dike using absorbent materials. Collect the remainder of the spill with absorbent materials and place the material into a drum approved for waste disposal. For a minor spill, absorb with sawdust or other absorbent and shovel into open top containers. Keep away from water. Cover mops and brooms with plastic and dispose by incineration.

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: Minimize vaporization by sealing in tightly closed container. Store in a cool, well ventilated area. Avoid eye and skin contact when transferring from containers.

OTHER PRECAUTIONS: Liquids are incinerated. Solids are incinerated or land filled. Empty plastic or steel drums should be decontaminated by filling with water and allowed to stand for 48 hours. Drain, triple rinse and hole drums to prevent re-use. The undamaged, empty decontaminated container may also be offered for reconditioning and recycling. Follow all local, state and federal laws.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS / VENTILATION: Provide local exhaust ventilation while handling.

RESPIRATORY PROTECTION: A NIOSH approved respirator for mists may be worn. For vapor, a NIOSH approved respirator for organics may be used.

EYE PROTECTION: Wear safety glasses or splash proof goggles.

SKIN PROTECTION: Wear impervious body covering, gloves and boots where splashing may occur. Use nitrile or natural rubber gloves.

OTHER PROTECTIVE EQUIPMENT: N/A

WORK HYGIENIC PRACTICES: Avoid contact with eyes and skin. Wash thoroughly after handling and before eating or drinking.

EXPOSURE GUIDELINES: N/A

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE & ODOR:	Black colored liquid with a mild hydrocarbon odor.		
FLASH POINT:	No data	**LOWER EXPLOSIVE LIMIT:**	No data
METHOD USED:	No data	**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:	No data	**SPECIFIC GRAVITY:**	1.10
VAPOR DENSITY:	>1	**PERCENT VOLATILE:**	No data
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): None known.

INCOMPATIBILITY (MATERIAL TO AVOID): Water, acids, bases, ammonia, alcohols. The combined effect of CO_2 and heat can produce enough pressure to rupture containers.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: None known.

HAZARDOUS POLYMERIZATION: May occur. Contact with moisture, other materials which react with isocyanates, or termperatures above 400^{o}F may cause polymerization.

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION: Oral

Rats: LD50 >10,000 mg/kg

Dermal

Rabbits: LD50 >2,000 mg/kg

Inhalation:

4,4' Methylene Diphenyl Isocyanate (MDI): Rat: 370 – 490 mg/m3

Polymeric Diphenylmethane Diisocyanate (MDI): Rat: 172 – 187 mg/m3

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: No information available.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: This product, as supplied, is not regulated as a hazardous waste by the U.S. Environmental Protection Agency (EPA) under Resource Conservation and Recovery Act (RCRA) regulations. Comply with state and local regulations for disposal.

RCRA HAZARD CLASS: None

SECTION 14: TRANSPORTATION INFORMATION

U.S. DOT TRANSPORTATION

PROPER SHIPPING NAME:	This product is not classified as a hazardous material for transport.
HAZARD CLASS:	N/A
ID NUMBER:	N/A
PACKING GROUP:	N/A
LABEL STATEMENT:	N/A
OTHER:	N/A

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

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

CERCLA: Reportable Quantity:
4,4' Methylene Diphenyl Isocyanate (MDI) 101-68-8 5,000 lbs

SARA

311/312 HAZARD CATEGORIES: Acute Health Hazard (Immediate), Chronic Health Hazard (Delayed)

313 REPORTABLE INGREDIENTS: 4,4' Methylene Diphenyl Isocyanate (MDI) 101-68-8, 55-80%
Polymeric Diphenylmethane Diisocyanate (MDI) 9016-87-9, 20-45%

CALIFORNIA PROPOSITION 65: N/A

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
4,4' Methylene Diphenyl Isocyanate (MDI)	101-68-8	Yes	No	No	Yes	No	Yes
Polymeric Diphenylmethane Diisocyanate (MDI)	9016-87-9	No	No	No	No	No	No

SECTION 16: OTHER INFORMATION

ADDITIONAL COMMENTS: None

DATE OF PREVIOUS SDS: October 2013

CHANGES SINCE PREVIOUS SDS: Headquarters Address 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.