GAF
Safety Data Sheet
SDS # 4024
SDS Date: May 2019

SECTION 1: PRODUCT AND COMPANY INFORMATION

PRODUCT NAME:	SBS Ribbon Adhesive Part 1
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	*3*	**Health**	*3*
Flammable	*1*	***Flammable***	*1*
Reactive	*1*	**Reactive**	*1*
Special Hazards	-	**Personal Protection**	X

GHS LABEL ELEMENTS:

GHS CLASSIFICATION:

Resp. Sens. - 1
Acute Tox. - 4
Eye Irritant - Category 2A
Skin Irritant - Category 2
Skin Sens. – 1
Target Organ (SE) - Category 4
Flam. Liq. - 4

GHS PICTOGRAMS: 

SIGNAL WORD: Danger

HAZARD STATEMENTS:
Combustible liquid.
Causes skin irritation.
Causes serious eye irritation
May cause respiratory irritation.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Harmful if inhaled.
May cause an allergic skin reaction.

PRECAUTIONARY STATEMENTS:
Avoid breathing dust/fume/gas/mist/vapors/spray.
Keep away from flames and hot surfaces. – No smoking.
Wash thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing must not be allowed out of the workplace.
Wear protective gloves / protective clothing / eye protection / face protection.
Store in a well-ventilated place. Keep container tightly closed.

ADDITIONAL HAZARD IDENTIFICATION INFORMATION:

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

SIGNS & SYMPTOMS OF EXPOSURE

EYES: Exposure to vapors can cause conjunctivitis or irritation to the eyes.

SKIN: Irritating to the skin. Prolonged contact can cause reddening of the skin.

INGESTION: Not expected to be ingested.

INHALATION: Vapors or mists can cause irritation of nasal passages, throat and lungs.

ACUTE HEALTH HAZARDS: Irritation to the eyes, skin and respiratory tract.

CHRONIC HEALTH HAZARDS: None known.

CARCINOGENICITY: Not applicable.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

			OCCUPATIONAL EXPOSURE LIMITS		
CHEMICAL NAME	**CAS #**	**% (BY WT)**	**OSHA**	**ACGIH**	**OTHER**
Isocyanates, Reaction product of polyol with Methylenediphenyl diisocyanate	39420-98-9	25 – 50	NE	NE	NE
4,4'-methylenediphenyl diisocyanate	101-68-8	10 – 25	0.2 mg/m³, 0.02 ppm	0.051 mg/m³, 0.005 ppm	REL: 0.05 mg/m³, 0.005 ppm 0.2* mg/m³, 0.02* ppm *10-min ceiling
Methylenediphenyl diisocyanate	26447-40-5	2.5 – 10	NE	NE	NE

NE = Not Established

SECTION 4: FIRST AID MEASURES

FIRST AID PROCEDURES

EYES: Flush eyes with water for 20 minutes. If irritation persists, call a physician.

SKIN: Wash area thoroughly with soap and water. If skin becomes irritated seek medical attention.

INHALATION: Remove person to an area that has fresh air. If breathing has stopped, administer artificial respiration. Contact physician immediately.

INGESTION: Call physician immediately. Never give anything by mouth to an unconscious person.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: No further relevant information available.

SECTION 5: FIRE FIGHTING PROCEDURES

SUITABLE EXTINGUISHING MEDIA: Water spray, CO_2, Dry chemical or foam.

HAZARDOUS COMBUSTION PRODUCTS:	Carbon dioxide and carbon monoxide.
RECOMMENDED FIRE FIGHTING PROCEDURES:	Self-contained breathing apparatus recommended.
UNUSUAL FIRE & EXPLOSION HAZARDS:	Dried solids can burn and release toxic fumes and vapors. Container may rupture from gas generation in a fire situation. This reaction may be violent.

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES:

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Dam up area to prevent spreading.

Cover spilled material with neutralization solution (see below) and mix. Wait 15 minutes. Collect material in open- head metal containers. Repeat neutralization and cleaning process until surface is decontaminated. Apply drum lid but DO NOT secure. Allow containers to vent for 72 hours to let carbon dioxide escape. Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose of contaminated material as waste in accordance with federal state and local regulations. Ensure adequate ventilation.

Neutralization solutions:
1. A mixture of 90% water. 3-8% ammonium hydroxide or concentrated ammonia, and 2% liquid detergent.
2. A mixture of 80% water, 20% non-ionic surfactant.

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE:	Store in a well ventilated area at 32 – 90^{o} F. Do not handle until all safety precautions have been read and understood. Do not breathe mist or vapor. Avoid prolonged exposure. When using, do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Protect from atmospheric moisture.
OTHER PRECAUTIONS:	Product reacts with water. Reaction may produce heat and/or gases. Container may rupture from gas generation in a fire situation. This reaction may be violent.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS / VENTILATION: Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure limits.

RESPIRATORY PROTECTION: Use NIOSH-approved respirator if required.

EYE PROTECTION: Safety goggles or safety glasses with side shields.

SKIN PROTECTION: Wear appropriate impermeable gloves and protective clothing as necessary to prevent skin contact.

WORK HYGIENIC PRACTICES: Wash exposed skin prior to eating, drinking, or smoking and at the end of each shift.

EXPOSURE GUIDELINES: Not applicable.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE & ODOR:	Tan thick aromatic liquid.		
FLASH POINT:	199 ° F	**LOWER EXPLOSIVE LIMIT:**	No data
METHOD USED:	No data	**UPPER EXPLOSIVE LIMIT:**	No data
EVAPORATION RATE:	No data	**BOILING POINT:**	>177° C
pH (undiluted product):	No data	**MELTING POINT:**	No data
SOLUBILITY IN WATER:	Reacts with water	**SPECIFIC GRAVITY:**	9.18 lbs/gal
VAPOR DENSITY:	No data	**PERCENT VOLATILE:**	No data
VAPOR PRESSURE:	No data	**MOLECULAR WEIGHT:**	No data
VOC WITH WATER (LBS/GAL):	0.0%	**WITHOUT WATER (LBS/GAL):**	0.0%

SECTION 10: STABILITY AND REACTIVITY

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

INCOMPATIBILTY: Contact with moisture, other materials that react with isocyanates, or temperatures above 350F (177C), may cause polymerization. Reacts with amines, caustic alkali solutions, alcohols, ammonia, oxidizers, acids, polyols. Reacts with water forming carbon dioxide-may rupture sealed containers if contaminated with water. May produce violent reactions with bases and numerous organic substances including alcohols and amines.

HAZARDOUS DECOMPOSITION OR BY- PRODUCTS: Violent reaction with water at high temperatures. May produce

violent reactions with bases and numerous organic substances including alcohols and amines. MDI reacts slowly with water to form Carbon Dioxide gas. This gas can cause sealed containers to expand and possibly rupture. Contact with moisture, other materials that react with isocyanates, or temperatures above 350F, may cause polymerization. Decomposes to carbon dioxide, carbon monoxide, oxides of nitrogen, dense black smoke, hydrogen cyanide, isocyanic acid, and other undetermined compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

LD/LC50 values that are relevant for classification:

101-68-8 4,4'-methylenediphenyl diisocyanate
Oral LD50 2,200 mg/kg (mouse)

Primary irritant effect:
on the skin:
Skin irritant.
Irritant to skin and mucous membranes.
on the eye: Irritating effect.
Sensitization:
Inhalation - Sensitization possible through inhalation. Skin Contact - Sensitization possible through skin contact.
Additional toxicological information:
The product shows the following dangers according to internally approved calculation methods for preparations:
Harmful
Irritatant

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: No information available.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national regulations.

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: MDI (101-68-8), 5,000 lbs.

SARA

311/312 HAZARD CATEGORIES: Acute Health Hazard

313 REPORTABLE INGREDIENTS:

101-68-8	4,4'-methylenediphenyl diisocyanate
39420-98-9	Isocyanates, Reaction product of polyol with Methylenediphenyl diisocyanate

CALIFORNIA PROPOSITION 65: This product can expose you to Diisodecyl phthalate, which is known to the State of California to cause birth defects or other reproductive harm

Chemical Name	CAS #	CA	MA	MN	NJ	PA	RI
4,4'-methylenediphenyl diisocyanate	101-68-8	Yes	No	Yes	Yes	Yes	Yes

SECTION 16: OTHER INFORMATION

ADDITIONAL COMMENTS: None.

DATE OF PREVIOUS SDS: None. New SDS.

CHANGES SINCE PREVIOUS SDS: New SDS.

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.