

Safety Data Sheet

GenFlex Roofing Systems

Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product identifier

Product Name | **Splice Adhesive SA-1065**

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified use(s) | Roof Application - Adhesive

Use(s) advised against | Anything other than roof application.

1.3 Details of the supplier of the safety data sheet

Manufacturer | Firestone Building Products Company

250 West 96th Street
Indianapolis, IN 46260
United States

genflexmsds@bfdp.com

Telephone (General) | 800-428-4442

1.4 Emergency telephone number

Manufacturer | (800) 424-9300 - CHEMTREC

Manufacturer | (703) 527-3887 - CHEMTREC - International

Section 2: Hazards Identification

EU/EEC

According to Regulation (EC) No 1272/2008 (CLP)/REACH 1907/2006 [amended by 453/2010]

According to EU Directive 67/548/EEC (DSD) or 1999/45/EC (DPD)

2.1 Classification of the substance or mixture

CLP | Flammable Liquids 2 - H225
Skin Irritation 2 - H315
Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects - H336
Reproductive Toxicity 2 - H361fd
Specific Target Organ Toxicity Repeated Exposure 2 - H373
Hazardous to the aquatic environment Chronic 3 - H412

DSD/DPD | Highly Flammable (F)
Irritant (Xi)
Harmful (Xn)
Substances Toxic To Reproduction - Category 3
R11, R38, R48/20, R62, R63, R67, R52, R53

2.2 Label Elements

CLP

DANGER



Hazard statements | H225 - Highly flammable liquid and vapour
 H315 - Causes skin irritation
 H336 - May cause drowsiness or dizziness
 H361fd - Suspected of damaging fertility. Suspected of damaging the unborn child.
 H373 - May cause damage to organs Central Nervous System and Nervous System through prolonged or repeated exposure
 H412 - Harmful to aquatic life with long lasting effects

Precautionary statements

Prevention | P201 - Obtain special instructions before use.
 P202 - Do not handle until all safety precautions have been read and understood.
 P210 - Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking.
 P233 - Keep container tightly closed.
 P240 - Ground and/or bond container and receiving equipment.
 P241 - Use explosion-proof electrical/ventilating/lighting/equipment.
 P242 - Use only non-sparking tools.
 P243 - Take precautionary measures against static discharge.
 P260 - Do not breathe mist/vapours/spray.
 P264 - Wash thoroughly after handling.
 P271 - Use only outdoors or in a well-ventilated area.
 P273 - Avoid release to the environment.
 P280 - Wear protective gloves/protective clothing/eye protection/face protection.
 P281 - Use personal protective equipment as required.

Response | P370+P378 - In case of fire: Use appropriate media for extinction.
 P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P312 - Call a POISON CENTER or doctor/physician if you feel unwell.
 P303 - IF ON SKIN (or hair):
 P353 - Rinse skin with water/shower.
 P332+P313 - If skin irritation occurs: Get medical advice/attention.
 P321 - Specific treatment, see supplemental first aid information.
 P362 - Take off contaminated clothing and wash before reuse.
 P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P337+P313 - If eye irritation persists: Get medical advice/attention.
 P308+P313 - IF exposed or concerned: Get medical advice/attention.
 P314 - Get medical advice/attention if you feel unwell.

Storage/Disposal | P235 - Keep cool.
 P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
 P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Supplemental information | 25-35 percent of this product consists of an ingredient of unknown toxicity.

DSD/DPD



Risk phrases | R11 - Highly flammable.
 R38 - Irritating to skin.
 R48/20 - Harmful: danger of serious damage to health by prolonged exposure through inhalation.
 R62 - Possible risk of impaired fertility.
 R63 - Possible risk of harm to the unborn child.
 R67 - Vapours may cause drowsiness and dizziness.
 R52 - Harmful to aquatic organisms.
 R53 - May cause long-term adverse effects in the aquatic environment.

Safety phrases | S9 - Keep container in a well ventilated place
 S16 - Keep away from sources of ignition - No Smoking.
 S37 - Wear suitable gloves.

2.3 Other Hazards

- CLP** | According to Regulation (EC) No. 1272/2008 (CLP) this material is considered hazardous.
- DSD/DPD** | According to European Directive 1999/45/EC this preparation is considered dangerous.

United States (US)

According to OSHA 29 CFR 1910.1200 HCS

2.1 Classification of the substance or mixture

- OSHA HCS 2012** | Flammable Liquids 2 - H225
 Acute Toxicity Oral 4 - H302
 Skin Irritation 2 - H315
 Eye Irritation 2A - H319
 Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects - H336
 Reproductive Toxicity 2 - H361
 Specific Target Organ Toxicity Repeated Exposure 2 - H373

2.2 Label elements

OSHA HCS 2012

DANGER



- Hazard statements** | Highly flammable liquid and vapour - H225
 Harmful if swallowed - H302
 Causes skin irritation - H315
 Causes serious eye irritation - H319
 May cause drowsiness or dizziness - H336
 Suspected of damaging fertility or the unborn child. - H361
 May cause damage to organs Central Nervous System and Nervous System through prolonged or repeated exposure - H373

Precautionary statements

- Prevention** | Obtain special instructions before use. - P201
 Do not handle until all safety precautions have been read and understood. - P202
 Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking. - P210
 Keep container tightly closed. - P233
 Ground and/or bond container and receiving equipment. - P240
 Use explosion-proof electrical/ventilating/lighting/equipment. - P241
 Use only non-sparking tools. - P242
 Take precautionary measures against static discharge. - P243
 Do not breathe mist/vapours/spray. - P260
 Wash thoroughly after handling. - P264
 Do not eat, drink or smoke when using this product. - P270
 Use only outdoors or in a well-ventilated area. - P271
 Wear protective gloves/protective clothing/eye protection/face protection. - P280
- Response** | In case of fire: Use appropriate media for extinction. - P370+P378
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. - P304+P340
 Call a POISON CENTER or doctor/physician if you feel unwell. - P312
 IF ON SKIN (or hair): - P303
 Rinse skin with water/shower. - P353
 If skin irritation occurs: Get medical advice/attention. - P332+P313
 Specific treatment, see supplemental first aid information. - P321
 Take off contaminated clothing and wash before reuse. - P362
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. - P305+P351+P338
 If eye irritation persists: Get medical advice/attention. - P337+P313

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician if you feel unwell. - P301+P312
 Rinse mouth. - P330
 IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician. - P309+P311

Storage/Disposal | Keep cool. - P235
 Store in a well-ventilated place. Keep container tightly closed. - P403+P233
 Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. - P501

Supplemental information | 25-35 percent of this product consists of an ingredient of unknown toxicity.

2.3 Other hazards

OSHA HCS 2012 | Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

Canada

According to WHMIS

2.1 Classification of the substance or mixture

WHMIS | Flammable Liquids - B2
 Other Toxic Effects - D2A
 Other Toxic Effects - D2B

2.2 Label elements

WHMIS



| Flammable Liquids - B2
 Other Toxic Effects - D2A
 Other Toxic Effects - D2B

2.3 Other hazards

WHMIS

| In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

2.4 Other information

| 20-25 percent of this product consists of an ingredient of unknown toxicity.

See Section 12 for Ecological Information.

Section 3 - Composition/Information on Ingredients

3.1 Substances

| Material does not meet the criteria of a substance in accordance with Regulation (EC) No 1272/2008.

3.2 Mixtures

Composition					
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive	Comments

Toluene	CAS: 108-88-3 EC Number: 203-625-9 UN: UN1294	20% TO 50%	Ingestion/Oral-Rat LD50 • 636 mg/kg Inhalation-Rat LC50 • 49 g/m ³ 4 Hour(s) Skin-Rabbit LD50 • 14100 µL/kg	EU DSD/DPD: Annex I - F; R11 Repr. Cat. 3; R63 Xn; R48/20-65 R67 Xi; R38 EU CLP: Annex VI - Flam. Liq. 2, H226; Repr. 2, H361d; Asp. Tox. 1, H304; STOT RE 2 * H373; Skin Irrit. 2, H315; STOT SE 3, H336 OSHA HCS 2012: Flam. Liq. 2; Eye Irrit. 2A; Skin Irrit. 2; Repr. 2; Acute Tox. 4 (oral); STOT SE 3: Narc.; Asp. Tox. 1	NDA
Xylene	CAS: 1330-20-7 EC Number: 215-535-7 UN: UN1307	2.5% TO 10%	Ingestion/Oral-Rat LD50 • 4300 mg/kg Inhalation-Rat LC50 • 5000 ppm 4 Hour(s) Skin-Rabbit LD50 • >1700 mg/kg	EU DSD/DPD: Annex I - R10 Xn; R20/21 Xi; R38 EU CLP: Annex VI - Flam. Liq. 3, H226; Acute Tox. 4 * H312; Acute Tox. 4 * H332; Skin Irrit. 2 , H315 OSHA HCS 2012: Flam. Liq. 3; Acute Tox. 4 (skin); Eye Irrit. 2A; Skin Irrit. 2, Repr. 2 (inhalation)	NDA
Hexane	CAS: 110-54-3 EC Number: 203-777-6	5% TO 20%	Ingestion/Oral-Rat LD50 • 25 g/kg Inhalation-Rat LC50 • 48000 ppm 4 Hour(s)	EU DSD/DPD: Annex I - F; R11; Repr. 3; R62; Xn; R65-48/20; Xi; R38; R67; N; R51-53 EU CLP: Annex VI - Flam. Liq. 2, H225; Repr. 2, H361f; Asp. Tox. 1, H304; STOT RE 2*, H373; Skin Irrit. 2, H315; STOT SE 3: Narc., H336; Aquatic Chronic 2, H411 OSHA HCS 2012: Flam. Liq. 2; Repr. 2; STOT RE 2 - CNS & Nervous System; Skin Irrit. 2; Eye Irrit. 2B; STOT SE 3: Narc. & Resp. Irrit.; Asp. Tox. 1	NDA
Hexamethylene diisocyanate homopolymer	CAS: 28182-81-2 EC Number:	< 2.5%	Inhalation-Rat LC50 • 18500 mg/m ³ 1 Hour (s)	EU DSD/DPD: Self Classified - Xi, R36/38 EU CLP: Self Classified - Eye Irrit. 2A, Skin Irrit 2 OSHA HCS 2012: Eye Irrit. 2A, Skin Irrit 2	NDA
Isobutylene-Isoprene polymer	CAS: 9010-85-9	20% TO 30%	NDA	EU DSD/DPD: Data Lacking EU CLP: Data Lacking OSHA HCS 2012: Data Lacking	NDA

See Section 11 for Toxicological Information.

Section 4 - First Aid Measures

4.1 Description of first aid measures

Inhalation

- | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. Get medical attention immediately if symptoms occur.

Skin

- | Rinse skin with rubbing alcohol first, followed immediately by washing affected area with soap and water. Remove and isolate contaminated clothing and shoes. If skin irritation occurs: Get medical advice/attention.

Eye

- | In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. If eye irritation persists: Get medical advice/attention.

Ingestion

- | If swallowed, rinse mouth with water (only if the person is conscious) Do NOT induce vomiting. Do not give anything by mouth to an unconscious person. Get medical attention immediately if symptoms occur.

4.2 Most important symptoms and effects, both acute and delayed

- | Refer to Section 11 - Toxicological Information.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to Physician

- | All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Section 5 - Firefighting Measures

5.1 Extinguishing media

Suitable Extinguishing Media | LARGE FIRE: Water spray, fog or regular foam.
SMALL FIRES: Dry chemical, CO₂, water spray or regular foam.

Unsuitable Extinguishing Media | No data available.

5.2 Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards | Heat builds up pressure in closed containers. Cool with water stream.
Toxic fumes and vapors may be produced.

Hazardous Combustion Products | Carbon dioxide, carbon monoxide, acrid smoke, irritating fumes.

5.3 Advice for firefighters

- | Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.
- | Wear positive pressure self-contained breathing apparatus (SCBA).
- | Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- | Runoff from fire control may cause pollution.
- | LARGE FIRES: Dike fire-control water for later disposal.

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions | CAUTION: Victim may be a source of contamination. Do not touch or walk through spilled material.

Emergency Procedures | As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions. LARGE SPILL: Consider initial downwind evacuation for at least 300 meters (1000 feet) ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Ventilate closed spaces before entering.

6.2 Environmental precautions

- | Prevent entry into waterways, sewers, basements or confined areas.

6.3 Methods and material for containment and cleaning up

Containment/Clean-up Measures | Stop leak if you can do it without risk.
Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
Use clean non-sparking tools to collect absorbed material.
A vapor suppressing foam may be used to reduce vapors.
All equipment used when handling the product must be grounded.
LARGE SPILLS: Dike far ahead of liquid spill for later disposal.
LARGE SPILLS: Water spray may reduce vapor; but may not prevent ignition in closed spaces.

6.4 Reference to other sections

- | Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

Section 7 - Handling and Storage

7.1 Precautions for safe handling

Handling | Do not use in areas without adequate ventilation. Handle and open container with care.
Use good safety and industrial hygiene practices.

7.2 Conditions for safe storage, including any incompatibilities

Storage | Keep away from fire. Store in a well-ventilated place. Keep container tightly closed.

7.3 Specific end use(s)

| Refer to Section 1.2 - Relevant identified uses.

Section 8 - Exposure Controls/Personal Protection

8.1 Control parameters

Exposure Limits/Guidelines						
	Result	ACGIH	Canada Ontario	Canada Quebec	China	Europe
Xylene (1330-20-7)	STELs	150 ppm STEL	150 ppm STEL	150 ppm STEV; 651 mg/m3 STEV	100 mg/m3 STEL	Not established
	TWAs	100 ppm TWA	100 ppm TWA	100 ppm TWAEV; 434 mg/m3 TWAEV	50 mg/m3 TWA	Not established
Hexane (110-54-3)	TWAs	50 ppm TWA	50 ppm TWA	50 ppm TWAEV; 176 mg/m3 TWAEV	100 mg/m3 TWA	20 ppm TWA; 72 mg/m3 TWA
	STELs	Not established	Not established	Not established	180 mg/m3 STEL	Not established
Toluene (108-88-3)	STELs	Not established	Not established	Not established	100 mg/m3 STEL	100 ppm STEL; 384 mg/m3 STEL
	TWAs	20 ppm TWA	20 ppm TWA	50 ppm TWAEV; 188 mg/m3 TWAEV	50 mg/m3 TWA	50 ppm TWA; 192 mg/m3 TWA
Exposure Limits/Guidelines (Con't.)						
	Result	Germany DFG	Germany TRGS	NIOSH	OSHA	
Xylene (1330-20-7)	TWAs	Not established	100 ppm TWA AGW (all isomers, exposure factor 2); 440 mg/m3 TWA AGW (all isomers, exposure factor 2)	Not established	100 ppm TWA; 435 mg/m3 TWA	
	Ceilings	200 ppm Peak (all isomers); 880 mg/m3 Peak (all isomers)	Not established	Not established	Not established	
	MAKs	100 ppm TWA MAK; 440 mg/m3 TWA MAK	Not established	Not established	Not established	Not established
Hexane (110-54-3)	TWAs	Not established	50 ppm TWA AGW (exposure factor 8); 180 mg/m3 TWA AGW (exposure factor 8)	50 ppm TWA; 180 mg/m3 TWA	500 ppm TWA; 1800 mg/m3 TWA	
	Ceilings	400 ppm Peak; 1440 mg/m3 Peak	Not established	Not established	Not established	
	MAKs	50 ppm TWA MAK; 180 mg/m3 TWA MAK	Not established	Not established	Not established	Not established
	Ceilings	200 ppm Peak; 760 mg/m3 Peak	Not established	Not established	300 ppm Ceiling	
			50 ppm TWA AGW (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed,			

Toluene (108-88-3)	TWAs	Not established	exposure factor 4); 190 mg/m ³ TWA AGW (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed, exposure factor 4)	100 ppm TWA; 375 mg/m ³ TWA	200 ppm TWA
	STELs	Not established	Not established	150 ppm STEL; 560 mg/m ³ STEL	Not established
	MAKs	50 ppm TWA MAK; 190 mg/m ³ TWA MAK	Not established	Not established	Not established

Exposure Control Notations

China

- Toluene (108-88-3): **Skin:** (Skin notation)
- Hexane (110-54-3): **Skin:** (Skin notation)

Canada Ontario

- Hexane (110-54-3): **Skin:** (Absorption through skin, eyes, or mucous membranes)

Canada Quebec

- Toluene (108-88-3): **Skin:** (Skin designation)
- Hexane (110-54-3): **Skin:** (Skin designation)

ACGIH

- Toluene (108-88-3): **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen)
- Xylene (1330-20-7): **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen)
- Hexane (110-54-3): **Skin:** (Skin - potential significant contribution to overall exposure by the cutaneous route)

Germany TRGS

- Toluene (108-88-3): **Skin:** (skin notation)
- Xylene (1330-20-7): **Skin:** (skin notation (all isomers))

Germany DFG

- Toluene (108-88-3): **Pregnancy:** (no risk to embryo/fetus if exposure limits adhered to) | **Skin:** (skin notation)
- Xylene (1330-20-7): **Pregnancy:** (classification not yet possible (all isomers)) | **Skin:** (skin notation (all isomers))
- Hexane (110-54-3): **Pregnancy:** (no risk to embryo/fetus if exposure limits adhered to)

Exposure Limits Supplemental

ACGIH

- Toluene (108-88-3): **BEIs:** (0.02 mg/L Medium: blood Time: prior to last shift of workweek Parameter: Toluene; 0.03 mg/L Medium: urine Time: end of shift Parameter: Toluene; 0.3 mg/g creatinine Medium: urine Time: end of shift Parameter: o-Cresol with hydrolysis (background)) | **TLV Basis - Critical Effects:** (female reproductive; pregnancy loss; visual impairment)
- Xylene (1330-20-7): **BEIs:** (1.5 g/g creatinine Medium: urine Time: end of shift Parameter: Methylhippuric acids) | **TLV Basis - Critical Effects:** (CNS impairment; eye and upper respiratory tract irritation)
- Hexane (110-54-3): **BEIs:** (0.4 mg/L Medium: urine Time: end of shift at end of workweek Parameter: 2,5-Hexanedione without hydrolysis) | **TLV Basis - Critical Effects:** (CNS impairment; eye irritation; peripheral neuropathy)

8.2 Exposure controls

Engineering Measures/Controls

- | This material is designed to be used outdoors, in roofing applications. Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Personal Protective Equipment

Respiratory

- | Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced.

Eye/Face

- | Wear protective eyewear (goggles, face shield, or safety glasses).

Skin/Body

- | Wear appropriate gloves.

Environmental Exposure Controls | In case of spills, keep product clear of sewers, waterways or land areas. Dispose of waste product in accordance with national and local laws and regulations.

Section 9 - Physical and Chemical Properties

9.1 Information on Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Appearance/Description	Black viscous liquid with aromatic odor.
Color	Black	Odor	Aromatic
Odor Threshold	Data lacking		
General Properties			
Boiling Point	217 F(102.7778 C)	Melting Point	Data lacking
Decomposition Temperature	Data lacking	Heat of Decomposition	Data lacking
pH	Data lacking	Specific Gravity/Relative Density	0.86 Water=1
Water Solubility	Negligible < 0.1 %	Viscosity	Not relevant
Explosive Properties	Explosion hazard.	Oxidizing Properties:	Static hazard.
Volatility			
Vapor Pressure	120 mmHg (torr) @ 20 C(68 F)	Vapor Density	> 3.7 Air=1
Evaporation Rate	1.9 to 9.5 n-Butyl Acetate = 1	Volatiles (Wt.)	71.4 %
Flammability			
Flash Point	1 F(-17.2222 C) TCC (Tagliabue Closed Cup)	UEL	7.4 %
LEL	1.2 %	Autoignition	Product is not self-igniting.
Flammability (solid, gas)	Not relevant.		
Environmental			
Octanol/Water Partition coefficient	Data lacking		

9.2 Other Information

| No additional physical and chemical parameters noted.

Section 10: Stability and Reactivity

10.1 Reactivity

| No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

| Stable under normal temperatures and pressures.

10.3 Possibility of hazardous reactions

| Hazardous polymerization will not occur.

10.4 Conditions to avoid

| Avoid flames, sparks, and other sources of ignition. Avoid contact with combustible materials. Avoid contact with incompatible materials.

10.5 Incompatible materials

| Acids, bases, combustible materials, oxidizing materials.

10.6 Hazardous decomposition products

| Thermal decomposition could produce CO, CO₂, and Oxides of Nitrogen.

Section 11 - Toxicological Information

11.1 Information on toxicological effects

Components		
Toluene (20% TO 50%)	108- 88-3	Acute Toxicity: Ingestion/Oral-Rat LD50 • 636 mg/kg; Inhalation-Rat LC50 • 49 g/m ³ 4 Hour(s); Skin-Rabbit LD50 • 14100 µL/kg; Irritation: Eye-Rabbit • 2 mg 24 Hour(s) • Severe irritation; Skin-Rabbit • 20 mg 24 Hour(s) • Moderate irritation; Reproductive: Inhalation-Rat TCLo • 800 mg/m ³ 6 Hour(s)(14-20D preg); <i>Reproductive Effects:Effects on Embryo or Fetus:Fetotoxicity (except death, e.g., stunted fetus); Reproductive Effects:Effects on Newborn:Behavioral</i>
Xylene (2.5% TO 10%)	1330- 20-7	Acute Toxicity: Ingestion/Oral-Rat LD50 • 4300 mg/kg; <i>Liver:Other changes; Kidney, Ureter, and Bladder:Other changes</i> ; Inhalation-Rat LC50 • 5000 ppm 4 Hour(s); Skin-Rabbit LD50 • >1700 mg/kg; Irritation: Eye-Rabbit • 5 mg 24 Hour(s) • Severe irritation; Skin-Rabbit • 500 mg 24 Hour(s) • Moderate irritation; Reproductive: Inhalation-Rat TCLo • 50 mg/m ³ 6 Hour(s)(1-21D preg); <i>Reproductive Effects:Specific Developmental Abnormalities:Musculoskeletal system; Reproductive Effects:Specific Developmental Abnormalities:Other developmental abnormalities; Reproductive Effects:Effects on Newborn:Growth statistics (e.g., reduced weight gain)</i>
Hexane (5% TO 20%)	110- 54-3	Acute Toxicity: Ingestion/Oral-Rat LD50 • 25 g/kg; Inhalation-Rat LC50 • 48000 ppm 4 Hour(s); Irritation: Eye-Rabbit • 10 mg • Mild irritation; Reproductive: Inhalation-Rat TCLo • 5000 ppm (6-19D preg); <i>Reproductive Effects:Specific Developmental Abnormalities:Musculoskeletal system; Reproductive Effects:Specific Developmental Abnormalities:Urogenital system</i>

GHS Properties	Classification
Acute toxicity	EU/CLP • Classification criteria not met OSHA HCS 2012 • Acute Toxicity - Oral 4
Aspiration Hazard	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Carcinogenicity	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Germ Cell Mutagenicity	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Skin corrosion/Irritation	EU/CLP • Skin Irritation 2 OSHA HCS 2012 • Skin Irritation 2
Skin sensitization	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
STOT-RE	EU/CLP • Specific Target Organ Toxicity Repeated Exposure 2 OSHA HCS 2012 • Specific Target Organ Toxicity Repeated Exposure 2
STOT-SE	EU/CLP • Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects OSHA HCS 2012 • Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects
Toxicity for Reproduction	EU/CLP • H361d - Suspected of damaging the unborn child; H361f - Suspected of damaging fertility; Toxic to Reproduction 2 OSHA HCS 2012 • Toxic to Reproduction 2
Respiratory sensitization	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Serious eye damage/Irritation	EU/CLP • Classification criteria not met OSHA HCS 2012 • Eye Irritation 2A

Route(s) of entry/exposure | Skin, Eye

Potential Health Effects**Inhalation**

- Acute (Immediate)** | May be harmful. May affect the central nervous system. Symptoms may include dizziness, drowsiness, lethargy, coma and death.
- Chronic (Delayed)** | Repeated and prolonged exposure may cause Central Nervous System (CNS) effects.

Skin

- Acute (Immediate)** | Causes skin irritation.
- Chronic (Delayed)** | No data available.

Eye

- Acute (Immediate)** | Causes serious eye irritation.
- Chronic (Delayed)** | No data available.

Ingestion

- Acute (Immediate)** | May be harmful.
- Chronic (Delayed)** | No data available.

- Reproductive Effects** | Repeated and prolonged exposure may cause reproductive effects.

Section 12 - Ecological Information**12.1 Toxicity**

- | This material may be toxic to aquatic organisms and cause long-term adverse effects in the aquatic environment.

12.2 Persistence and degradability

- | No information available for the product.

12.3 Bioaccumulative potential

- | No information available for the product.

12.4 Mobility in Soil

- | No information available for the product.

12.5 Results of PBT and vPvB assessment

- | PBT and vPvB assessment has not been carried out.

12.6 Other adverse effects

- | No studies have been found.

Section 13 - Disposal Considerations**13.1 Waste treatment methods**

- Product waste** | Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.
- Packaging waste** | Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

	14.1 UN number	14.2 UN proper shipping name	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards
DOT	UN1133	Adhesives	3	II	NDA
TDG	UN1133	ADHESIVES	3	II	NDA
IMO/IMDG	UN1133	ADHESIVES	3	II	NDA
ADN	UN1133	ADHESIVES	3	II	NDA
ADR/RID	UN1133	Adhesives	3	II	NDA
IATA/ICAO	UN1133	Adhesives	3	II	NDA

14.6 Special precautions for user | None known.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | Not relevant.

14.8 Other information

DOT | Toluene has a reportable quantity of 1000 lbs (454 kg) as listed in Appendix A to 49 CFR 172.101. Xylene has a reportable quantity of 1000 lbs (454 kg) as listed in Appendix A to 49 CFR 172.101. Hexane has a reportable quantity of 5000 lbs (2270 kg) as listed in Appendix A to 49 CFR 172.101.

Section 15 - Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications | Acute, Chronic, Fire

State Right To Know				
Component	CAS	MA	NJ	PA
Hexamethylene diisocyanate homopolymer	28182-81-2	No	No	No
Hexane	110-54-3	Yes	Yes	Yes
Isobutylene-Isoprene polymer	9010-85-9	No	No	No
Toluene	108-88-3	Yes	Yes	Yes
Xylene	1330-20-7	Yes	Yes	Yes

Inventory						
Component	CAS	Canada DSL	Canada NDSL	China	EU EINECS	EU ELNICS
Hexamethylene diisocyanate homopolymer	28182-81-2	Yes	No	Yes	No	No
Hexane	110-54-3	Yes	No	Yes	Yes	No
Isobutylene-Isoprene polymer	9010-85-9	Yes	No	Yes	No	No
Toluene	108-88-3	Yes	No	Yes	Yes	No
Xylene	1330-20-7	Yes	No	Yes	Yes	No

Inventory (Con't.)				
Component	CAS	Japan ENCS	Korea KECL	TSCA
Hexamethylene diisocyanate homopolymer	28182-81-2	Yes	Yes	Yes
Hexane	110-54-3	Yes	Yes	Yes
Isobutylene-Isoprene polymer	9010-85-9	Yes	Yes	Yes
Toluene	108-88-3	Yes	Yes	Yes
Xylene	1330-20-7	Yes	Yes	Yes

Australia

Labor

Australia - Work Health and Safety Regulations - Hazardous Substances Requiring Health Monitoring

• Isobutylene-Isoprene polymer	9010-85-9	Not Listed
• Toluene	108-88-3	Not Listed
• Xylene	1330-20-7	Not Listed
• Hexane	110-54-3	Not Listed
• Hexamethylene diisocyanate homopolymer	28182-81-2	Not Listed

Australia - High Volume Industrial Chemicals List

• Isobutylene-Isoprene polymer	9010-85-9	Not Listed
• Toluene	108-88-3	
• Xylene	1330-20-7	
• Hexane	110-54-3	
• Hexamethylene diisocyanate homopolymer	28182-81-2	Not Listed

Australia - List of Designated Hazardous Substances - Classification

• Isobutylene-Isoprene polymer	9010-85-9	Not Listed
• Toluene	108-88-3	F, Xn, Xi Repr.Cat.3 R11, R63, R48/20, R65, R38, R67
• Xylene	1330-20-7	Xn, Xi R10, R20/21, R38
• Hexane	110-54-3	F, Xn, Xi, N Repr.Cat.3 R11, R62, R48/20, R65, R38, R67, R51, R53
• Hexamethylene diisocyanate homopolymer	28182-81-2	Not Listed

Environment

Australia - National Pollutant Inventory (NPI) Substance List

• Isobutylene-Isoprene polymer	9010-85-9	Not Listed
• Toluene	108-88-3	10 tonne/yr Threshold category 1
• Xylene	1330-20-7	10 tonne/yr Threshold category 1 (including individual or mixed isomers)
• Hexane	110-54-3	10 tonne/yr Threshold category 1
• Hexamethylene diisocyanate homopolymer	28182-81-2	Not Listed

Australia - Ozone Protection Act - Scheduled Substances

• Isobutylene-Isoprene polymer	9010-85-9	Not Listed
• Toluene	108-88-3	Not Listed
• Xylene	1330-20-7	Not Listed

• Hexane	110-54-3	Not Listed
• Hexamethylene diisocyanate homopolymer	28182-81-2	Not Listed

Australia - Priority Existing Chemical Program

• Isobutylene-Isoprene polymer	9010-85-9	Not Listed
• Toluene	108-88-3	Candidate chemical
• Xylene	1330-20-7	Candidate chemical
• Hexane	110-54-3	Not Listed
• Hexamethylene diisocyanate homopolymer	28182-81-2	Not Listed

Bulgaria**Environment****Bulgaria - Air Quality - Maximum Admissible Hazardous Contaminant Levels - 24 Hour**

• Isobutylene-Isoprene polymer	9010-85-9	Not Listed
• Toluene	108-88-3	0.25 mg/m3 MAHCL
• Xylene	1330-20-7	0.1 mg/m3 MAHCL
• Hexane	110-54-3	Not Listed
• Hexamethylene diisocyanate homopolymer	28182-81-2	Not Listed

Canada**Labor****Canada - WHMIS - Classifications of Substances**

• Isobutylene-Isoprene polymer	9010-85-9	Not Listed
• Toluene	108-88-3	B2, D2A, D2B
• Xylene	1330-20-7	B2, D2A, D2B
• Hexane	110-54-3	B2, D2A, D2B
• Hexamethylene diisocyanate homopolymer	28182-81-2	Not Listed

Canada - WHMIS - Ingredient Disclosure List

• Isobutylene-Isoprene polymer	9010-85-9	Not Listed
• Toluene	108-88-3	1 %
• Xylene	1330-20-7	Not Listed
• Hexane	110-54-3	1 %
• Hexamethylene diisocyanate homopolymer	28182-81-2	Not Listed

Environment**Canada - CEPA - Priority Substances List**

• Isobutylene-Isoprene polymer	9010-85-9	Not Listed
• Toluene	108-88-3	Priority Substance List 1 (substance not considered toxic)
• Xylene	1330-20-7	Priority Substance List 1 (substance not considered toxic)
• Hexane	110-54-3	Not Listed
• Hexamethylene diisocyanate homopolymer	28182-81-2	Not Listed

Europe**Other****EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification**

• Isobutylene-Isoprene polymer	9010-85-9	Not Listed
• Toluene	108-88-3	F; R11 Xi; R38 Xn; R48/20-65 Repr.Cat.3; R63 R67

• Xylene	1330-20-7	R10 Xn; R20/21 Xi; R38 F; R11 Xi; R38 N; R51-53
• Hexane	110-54-3	Repr.Cat.3; R62 Xn; R65-48/20 R67
• Hexamethylene diisocyanate homopolymer	28182-81-2	Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Concentration Limits

• Isobutylene-Isoprene polymer	9010-85-9	Not Listed
• Toluene	108-88-3	Not Listed
• Xylene	1330-20-7	12.5%≤C: Xn; R20/21
• Hexane	110-54-3	5%≤C: Xn; R48/20
• Hexamethylene diisocyanate homopolymer	28182-81-2	Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Labelling

• Isobutylene-Isoprene polymer	9010-85-9	Not Listed
• Toluene	108-88-3	F Xn R:11-38-48/20-63-65-67 S:(2)-36/37-46-62
• Xylene	1330-20-7	Xn R:10-20/21-38 S:(2)-25 F Xn N R:11-38-48/20-62-65-67-51/53 S:(2)-9-16-29-33-36/37-61-62
• Hexane	110-54-3	67-51/53 S:(2)-9-16-29-33-36/37-61-62
• Hexamethylene diisocyanate homopolymer	28182-81-2	Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Notes - Substances and Preparations

• Isobutylene-Isoprene polymer	9010-85-9	Not Listed
• Toluene	108-88-3	Not Listed
• Xylene	1330-20-7	C
• Hexane	110-54-3	Not Listed
• Hexamethylene diisocyanate homopolymer	28182-81-2	Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases

• Isobutylene-Isoprene polymer	9010-85-9	Not Listed
• Toluene	108-88-3	S:(2)-36/37-46-62
• Xylene	1330-20-7	S:(2)-25
• Hexane	110-54-3	S:(2)-9-16-29-33-36/37-61-62
• Hexamethylene diisocyanate homopolymer	28182-81-2	Not Listed

Mexico**Other****Mexico - Hazard Classifications**

• Isobutylene-Isoprene polymer	9010-85-9	Not Listed
• Toluene	108-88-3	Hazard Class = 3 PG = II UN1294
• Xylene	1330-20-7	Hazard Class = 3 PG = II UN1307; Hazard Class = 3 PG = III UN1307
• Hexane	110-54-3	Not Listed
• Hexamethylene diisocyanate homopolymer	28182-81-2	Not Listed

Mexico - Regulated Substances

• Isobutylene-Isoprene polymer	9010-85-9	Not Listed
• Toluene	108-88-3	UN1294
• Xylene	1330-20-7	UN1307; UN1307
• Hexane	110-54-3	Not Listed

• Hexamethylene diisocyanate homopolymer	28182-81-2	Not Listed
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United States

Labor

U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals

• Isobutylene-Isoprene polymer	9010-85-9	Not Listed
• Toluene	108-88-3	Not Listed
• Xylene	1330-20-7	Not Listed
• Hexane	110-54-3	Not Listed
• Hexamethylene diisocyanate homopolymer	28182-81-2	Not Listed

U.S. - OSHA - Specifically Regulated Chemicals

• Isobutylene-Isoprene polymer	9010-85-9	Not Listed
• Toluene	108-88-3	Not Listed
• Xylene	1330-20-7	Not Listed
• Hexane	110-54-3	Not Listed
• Hexamethylene diisocyanate homopolymer	28182-81-2	Not Listed

Environment

U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants

• Isobutylene-Isoprene polymer	9010-85-9	Not Listed
• Toluene	108-88-3	
• Xylene	1330-20-7	(isomers and mixtures)
• Hexane	110-54-3	
• Hexamethylene diisocyanate homopolymer	28182-81-2	Not Listed

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

• Isobutylene-Isoprene polymer	9010-85-9	Not Listed
• Toluene	108-88-3	1000 lb final RQ; 454 kg final RQ
• Xylene	1330-20-7	100 lb final RQ; 45.4 kg final RQ
• Hexane	110-54-3	5000 lb final RQ; 2270 kg final RQ
• Hexamethylene diisocyanate homopolymer	28182-81-2	Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs

• Isobutylene-Isoprene polymer	9010-85-9	Not Listed
• Toluene	108-88-3	Not Listed
• Xylene	1330-20-7	Not Listed
• Hexane	110-54-3	Not Listed
• Hexamethylene diisocyanate homopolymer	28182-81-2	Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs

• Isobutylene-Isoprene polymer	9010-85-9	Not Listed
• Toluene	108-88-3	Not Listed
• Xylene	1330-20-7	Not Listed
• Hexane	110-54-3	Not Listed
• Hexamethylene diisocyanate homopolymer	28182-81-2	Not Listed

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

• Isobutylene-Isoprene polymer	9010-85-9	Not Listed
• Toluene	108-88-3	1.0 % de minimis concentration

• Xylene	1330-20-7	1.0 % de minimis concentration
• Hexane	110-54-3	1.0 % de minimis concentration
• Hexamethylene diisocyanate homopolymer	28182-81-2	Not Listed

U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing

• Isobutylene-Isoprene polymer	9010-85-9	Not Listed
• Toluene	108-88-3	Not Listed
• Xylene	1330-20-7	Not Listed
• Hexane	110-54-3	Not Listed
• Hexamethylene diisocyanate homopolymer	28182-81-2	Not Listed

U.S. - RCRA (Resource Conservation & Recovery Act) - Hazardous Constituents - Appendix VIII to 40 CFR 261

• Isobutylene-Isoprene polymer	9010-85-9	Not Listed
• Toluene	108-88-3	waste number U220
• Xylene	1330-20-7	Not Listed
• Hexane	110-54-3	Not Listed
• Hexamethylene diisocyanate homopolymer	28182-81-2	Not Listed

U.S. - RCRA (Resource Conservation & Recovery Act) - List for Hazardous Constituents

• Isobutylene-Isoprene polymer	9010-85-9	Not Listed
• Toluene	108-88-3	
• Xylene	1330-20-7	
• Hexane	110-54-3	Not Listed
• Hexamethylene diisocyanate homopolymer	28182-81-2	Not Listed

United States - California**Environment****U.S. - California - Proposition 65 - Carcinogens List**

• Isobutylene-Isoprene polymer	9010-85-9	Not Listed
• Toluene	108-88-3	Not Listed
• Xylene	1330-20-7	Not Listed
• Hexane	110-54-3	Not Listed
• Hexamethylene diisocyanate homopolymer	28182-81-2	Not Listed

U.S. - California - Proposition 65 - Developmental Toxicity

• Isobutylene-Isoprene polymer	9010-85-9	Not Listed
• Toluene	108-88-3	developmental toxicity, initial date 1/1/91
• Xylene	1330-20-7	Not Listed
• Hexane	110-54-3	Not Listed
• Hexamethylene diisocyanate homopolymer	28182-81-2	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Female

• Isobutylene-Isoprene polymer	9010-85-9	Not Listed
• Toluene	108-88-3	female reproductive toxicity, initial date 8/7/09
• Xylene	1330-20-7	Not Listed
• Hexane	110-54-3	Not Listed
• Hexamethylene diisocyanate homopolymer	28182-81-2	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Male

• Isobutylene-Isoprene polymer	9010-85-9	Not Listed
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• Toluene	108-88-3	Not Listed
• Xylene	1330-20-7	Not Listed
• Hexane	110-54-3	Not Listed
• Hexamethylene diisocyanate homopolymer	28182-81-2	Not Listed

United States - Pennsylvania

Labor

U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

• Isobutylene-Isoprene polymer	9010-85-9	Not Listed
• Toluene	108-88-3	
• Xylene	1330-20-7	
• Hexane	110-54-3	Not Listed
• Hexamethylene diisocyanate homopolymer	28182-81-2	Not Listed

U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances

• Isobutylene-Isoprene polymer	9010-85-9	Not Listed
• Toluene	108-88-3	Not Listed
• Xylene	1330-20-7	Not Listed
• Hexane	110-54-3	Not Listed
• Hexamethylene diisocyanate homopolymer	28182-81-2	Not Listed

United States - Rhode Island

Labor

U.S. - Rhode Island - Hazardous Substance List

• Isobutylene-Isoprene polymer	9010-85-9	Not Listed
• Toluene	108-88-3	Toxic (skin); Flammable (skin)
• Xylene	1330-20-7	Toxic (skin); Flammable (skin)
• Hexane	110-54-3	Toxic; Flammable
• Hexamethylene diisocyanate homopolymer	28182-81-2	Not Listed

15.2 Chemical Safety Assessment

| No Chemical Safety Assessment has been carried out.

Section 16 - Other Information

Last Revision Date	07/May/2013
Preparation Date	11/January/2012
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Key to abbreviations

NDA = No data available