**Safety Data Sheet** **GenTite RRS**

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

### 1.1 Product identifier

**Product Name** • **Seam Adhesive Black**

### 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

gentitemsds@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 EU Directive 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<br>Inhalation-Rat LC50 • 49 g/m³ 4 Hour(s)<br>Skin-Rabbit LD50 • 14100 µL/kg | **EU DSD/DPD:** Annex I - F; R11 Repr. Cat. 3; R63 Xn; R48/20-65 R67 Xi; R38<br>**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<br>**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<br>Inhalation-Rat LC50 • 5000 ppm 4 Hour(s)<br>Skin-Rabbit LD50 • >1700 mg/kg | **EU DSD/DPD:** Annex I - R10 Xn; R20/21 Xi; R38<br>**EU CLP:** Annex VI - Flam. Liq. 3, H226; Acute Tox. 4 * H312; Acute Tox. 4 * H332; Skin Irrit. 2 , H315<br>**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<br>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<br>**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<br>**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/m³ 1 Hour (s) | **EU DSD/DPD:** Self Classified - Xi, R36/38<br>**EU CLP:** Self Classified - Eye Irrit. 2A, Skin Irrit 2<br>**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<br>**EU CLP:** Data Lacking<br>**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 |
| 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 |
| | 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/m3 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/m3 TWA | 200 ppm TWA |
| | STELs | Not established | Not established | 150 ppm STEL; 560 mg/m3 STEL | Not established |
| | MAKs | 50 ppm TWA MAK; 190 mg/m3 TWA MAK | Not established | Not established | Not established |

**Exposure Control Notations**

**Germany TRGS**

•Toluene (108-88-3): **Skin:** (skin notation) | **Skin:** (skin notation (all isomers))

**Germany DFG**

•Toluene (108-88-3): **Pregnancy:** (no risk to embryo/fetus if exposure limits adhered to) | **Pregnancy:** (classification not yet possible (all isomers)) | **Pregnancy:** (no risk to embryo/fetus if exposure limits adhered to) | **Skin:** (skin notation) | **Skin:** (skin notation (all isomers))

## 8.2 Exposure controls

**Engineering Measures/Controls**

- 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**

- Wear a NIOSH (or equivalent) certified respirator if exposure levels cannot be controlled below applicable exposure limits.

**Eye/Face**

- Wear splash resistant safety goggles with a faceshield. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

**Hands**

- Wear appropriate chemical resistant gloves (neoprene, nitrile, polyvinyl alcohol (PVA)).

**Skin/Body**

- Wear appropriate chemical resistant clothing.

**Environmental Exposure Controls**

- Avoid release to the environment.

# 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

| GHS Properties | Classification |
|---|---|
| **Acute toxicity** | **EU/CLP** • Classification criteria not met<br>**OSHA HCS 2012** • Acute Toxicity 4 (Ingestion/Oral) - ATEmix(oral)=967.7 mg/kg |
| **Aspiration Hazard** | **EU/CLP** • Classification criteria not met<br>**OSHA HCS 2012** • Classification criteria not met |
| **Carcinogenicity** | **EU/CLP** • Classification criteria not met<br>**OSHA HCS 2012** • Classification criteria not met |
| **Germ Cell Mutagenicity** | **EU/CLP** • Classification criteria not met<br>**OSHA HCS 2012** • Classification criteria not met |
| **Skin corrosion/Irritation** | **EU/CLP** • Skin Irritation 2<br>**OSHA HCS 2012** • Skin Irritation 2 |
| **Skin sensitization** | **EU/CLP** • Classification criteria not met<br>**OSHA HCS 2012** • Classification criteria not met |

| | |
|---|---|
| **STOT-RE** | **EU/CLP** • Specific Target Organ Toxicity Repeated Exposure 2<br>**OSHA HCS 2012** • Specific Target Organ Toxicity Repeated Exposure 2 |
| **STOT-SE** | **EU/CLP** • Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects<br>**OSHA HCS 2012** • Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects |
| **Toxicity for Reproduction** | **EU/CLP** • Toxic to Reproduction 2<br>**OSHA HCS 2012** • Toxic to Reproduction 2 |
| **Respiratory sensitization** | **EU/CLP** • Classification criteria not met<br>**OSHA HCS 2012** • Classification criteria not met |
| **Serious eye damage/Irritation** | **EU/CLP** • Classification criteria not met<br>**OSHA HCS 2012** • Eye Irritation 2A |

**Route(s) of entry/exposure**
- Skin, Eye, Ingestion/Oral

### 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 expousre 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** |
| Toluene | 108-88-3 | Yes | Yes | Yes |
| Xylene | 1330-20-7 | Yes | Yes | Yes |
| Hexane | 110-54-3 | Yes | Yes | Yes |
| Hexamethylene diisocyanate homopolymer | 28182-81-2 | No | No | No |
| Isobutylene-Isoprene polymer | 9010-85-9 | No | No | No |

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

**Bulgaria - Air Quality - Maximum Admissible Hazardous Contaminant Levels - 30 Minute**

| | | |
|---|---|---|
| • Isobutylene-Isoprene polymer | 9010-85-9 | Not Listed |
| • Toluene | 108-88-3 | Not Listed |
| • Xylene | 1330-20-7 | Not Listed |
| • Hexane | 110-54-3 | 60.0 mg/m3 MAHCL |
| • Hexamethylene diisocyanate homopolymer | 28182-81-2 | Not Listed |

**Bulgaria - Air Quality - Maximum Admissible Hazardous Contaminant Levels - Annual**

| | | |
|---|---|---|
| • 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 |

## Canada

### 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 |
| • Hexane | 110-54-3 | F; R11 Xi; R38 N; R51-53 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 |
| • Hexane | 110-54-3 | F Xn N R:11-38-48/20-62-65-67-51/53 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 |

## 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 |

## 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 - Maximum Allowable Dose Levels (MADL)**

| | | |
|---|---|---|
| • Isobutylene-Isoprene polymer | 9010-85-9 | Not Listed |
| • Toluene | 108-88-3 | 7000 µg/day MADL (level represents absorbed dose) |
| • 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 |

## 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 |

## 15.2 Chemical Safety Assessment

- No Chemical Safety Assessment has been carried out.

# Section 16 - Other Information

**Last Revision Date**
- 22/July/2013

**Preparation Date**
- 15/December/2010

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**Key to abbreviations**

NDA = No data available