Safety Data Sheet

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

1.1 Product identifier

Product Name: GenPrime™ LVOC

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

Relevant identified use(s): Construction

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

2.1 Classification of the substance or mixture

CLP
Flammable Liquids 2 - H225
Aspiration 1 - H304
Skin Irritation 2 - H315
Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects - H336
Reproductive Toxicity 2 - H361d
Specific Target Organ Toxicity Repeated Exposure 2 - H373

DSD/DPD
Highly Flammable (F)
Irritant (Xi)
Harmful (Xn)
Substances Toxic To Reproduction - Category 3
R11, R38, R48/20, R63, R65, R67

2.2 Label Elements

CLP
DANGER
Hazard statements
- H225 - Highly flammable liquid and vapour
- H304 - May be fatal if swallowed and enters airways
- H315 - Causes skin irritation
- H336 - May cause drowsiness or dizziness
- H361d - Suspected of damaging the unborn child.
- H373 - May cause damage to organs through prolonged or repeated exposure.

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 mists, vapours, and/or spray.
- P264 - Wash thoroughly after handling.
- P271 - Use only outdoors or in a well-ventilated area.
- P280 - Wear protective gloves and eye/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.
- P314 - Get medical advice/attention if you feel unwell.
- P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P321 - Specific treatment, see supplemental first aid information.
- P332+P313 - If skin irritation occurs: Get medical advice/attention.
- P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
- P331 - Do NOT induce vomiting.
- P308+P313 - IF exposed or concerned: Get medical advice/attention.

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

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 material 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
- Aspiration 1 - H225
- Skin Irritation 2 - H315
- Eye Irritation 2 - 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
- May be fatal if swallowed and enters airways - H304
- 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 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 mists, vapours, and/or spray. - P260
- Wash thoroughly after handling. - P264
- Use only outdoors or in a well-ventilated area. - P271
- Wear protective gloves and eye/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
- Get medical advice/attention if you feel unwell. - P314
- If on skin: Wash with plenty of water.
- Specific treatment, see supplemental first aid information. - P321
- If skin irritation occurs: Get medical advice/attention. - P332+P313
- 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. - P301+P310
- Do NOT induce vomiting. - P331
- If exposed or concerned: Get medical advice/attention. - P308+P313

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

2.3 Other hazards

OSHA HCS 2012

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).

Section 3 - Composition/Information on Ingredients

3.1 Substances

- Material does not meet the criteria of a substance.

3.2 Mixtures

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Identifiers</th>
<th>%</th>
<th>LD50/LC50</th>
<th>Classifications According to Regulation/Directive</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Chloro-4-(trifluoromethyl) benzene</td>
<td>CAS:98-56-6</td>
<td>50%</td>
<td>TO</td>
<td>EU DSD/DPD: Not Classified; EU CLP: Not Classified; OSHA HCS 2012: Not Classified</td>
<td>NDA</td>
</tr>
<tr>
<td></td>
<td>EC:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number:202-</td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>681-1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Ingestion/Oral-Rat</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>LD50 • 13 g/kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Inhalation-Rat LC50</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• 22 g/m³</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toluene</td>
<td>CAS:108-88-3</td>
<td>5%</td>
<td>TO</td>
<td>EU DSD/DPD: Annex VI, Table 3.2: F; R11; Repr. 3; R63; Xn; R48/20-65; Xi; R38; R67;</td>
<td>NDA</td>
</tr>
<tr>
<td></td>
<td>EC:</td>
<td>20%</td>
<td></td>
<td>EU CLP: Annex VI, Table 3.1: Flam. Liq. 2, H225; Repr. 2, H361d; Asp. Tox. 1, H304; STOT</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number:203-</td>
<td></td>
<td></td>
<td>RE 2*, H373; Skin Irrit. 2, H315; STOT SE 3: Narc., H336; OSHA HCS 2012: Flam. Liq. 2;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>625-9</td>
<td></td>
<td></td>
<td>Repr. 2; Acute Tox. 4 (oral); STOT SE 3: Narc.; Asp. Tox. 1; Eye Irrit. 2; Skin Irrit. 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU Index:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>601-021-00-3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Ingestion/Oral-Rat</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>LD50 • 636 mg/kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Inhalation-Rat LC50</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• 49 g/m² 4 Hour(s)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Skin-Rabbit LD50 •</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>14100 µL/kg</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section 4 - First Aid Measures

4.1 Description of first aid measures

Inhalation
- Move victim to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. Get medical attention.
### Skin
- Wash skin with soap and water. If irritation develops and persists, get medical 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
- Do NOT induce vomiting. Get medical attention immediately.

### 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**: Carbon dioxide, sand, extinguishing powder.
- **Unsuitable Extinguishing Media**: Do not use water.

### 5.2 Special hazards arising from the substance or mixture
- **Unusual Fire and Explosion Hazards**: HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames. Containers may explode when heated. Vapor explosion hazard indoors, outdoors or in sewers. Many liquids are lighter than water. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Runoff to sewer may create fire or explosion hazard. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back.

### 5.3 Advice for firefighters
- Structural firefighters’ protective clothing will only provide limited protection. Wear positive pressure self-contained breathing apparatus (SCBA). Move containers from fire area if you can do it without risk.

#### Hazardous Combustion Products
- No data available

---

**Section 6 - Accidental Release Measures**

### 6.1 Personal precautions, protective equipment and emergency procedures

#### Personal Precautions
- Ventilate enclosed areas. Do not walk through spilled material. Wear appropriate personal protective equipment, avoid direct contact. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Do not breathe mist/vapours/spray. Avoid contact with skin, eyes, and clothing.

#### 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
- Keep away from heat, sparks and open flame. Use only with adequate ventilation.
- Wear appropriate personal protective equipment, avoid direct contact. Do not breathe mist/vapours/spray. Avoid contact with skin, eyes, and clothing. Do not ingest. Take precautionary measures against static charges. Bond and ground all transfer containers and equipment. Containers, even those that have been emptied, can contain explosive vapors. Do not cut, drill, grind, weld or perform similar operations near container. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

7.2 Conditions for safe storage, including any incompatibilities
Storage
- Keep container tightly closed. Store in a cool/low-temperature, well-ventilated place away from heat and ignition sources. Protect from sunlight.

7.3 Specific end use(s)
- Refer to Section 1.2 - Relevant identified uses.

Section 8 - Exposure Controls/Personal Protection

8.1 Control parameters

<table>
<thead>
<tr>
<th>Result</th>
<th>ACGIH</th>
<th>Australia</th>
<th>Belgium</th>
<th>Canada Alberta</th>
<th>Canada British Columbia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene (108-88-3) STELs</td>
<td>Not established</td>
<td>150 ppm STEL; 574 mg/m3 STEL</td>
<td>100 ppm STEL; 384 mg/m3 STEL</td>
<td>Not established</td>
<td>Not established</td>
</tr>
<tr>
<td>TWAs</td>
<td>20 ppm TWA</td>
<td>50 ppm TWA; 191 mg/m3 TWA</td>
<td>22 ppm TWA; 77 mg/m3 TWA</td>
<td>50 ppm TWA; 188 mg/m3 TWA</td>
<td>20 ppm TWA</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Result</th>
<th>Canada Manitoba</th>
<th>Canada New Brunswick</th>
<th>Canada Northwest Territories</th>
<th>Canada Nova Scotia</th>
<th>Canada Nunavut</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene (108-88-3) TWAs</td>
<td>20 ppm TWA</td>
<td>50 ppm TWA; 188 mg/m3 TWA</td>
<td>100 ppm TWA; 375 mg/m3 TWA</td>
<td>20 ppm TWA</td>
<td>100 ppm TWA; 375 mg/m3 TWA</td>
</tr>
<tr>
<td>STELs</td>
<td>Not established</td>
<td>Not established</td>
<td>150 ppm STEL; 560 mg/m3 STEL</td>
<td>Not established</td>
<td>150 ppm STEL; 560 mg/m3 STEL</td>
</tr>
<tr>
<td>Result</td>
<td>Canada Ontario</td>
<td>Canada Quebec</td>
<td>Canada Saskatchewan</td>
<td>Canada Yukon</td>
<td>China</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Toluene (108-88-3) STELs</td>
<td>Not established</td>
<td>Not established</td>
<td>Not established</td>
<td>150 ppm STEL; 560 mg/m³ STEL</td>
<td>100 mg/m³ STEL</td>
</tr>
<tr>
<td>TWAs</td>
<td>20 ppm TWA</td>
<td>50 ppm TWAE; 188 mg/m³ TWAEV</td>
<td>50 ppm TWA</td>
<td>100 ppm TWA; 375 mg/m³ TWA</td>
<td>50 mg/m³ TWA</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Result</th>
<th>Cyprus</th>
<th>Denmark</th>
<th>Europe</th>
<th>Germany DFG</th>
<th>Germany TRGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene (108-88-3) STELs</td>
<td>100 ppm STEL; 384 mg/m³ STEL</td>
<td>Not established</td>
<td>100 ppm STEL; 384 mg/m³ STEL</td>
<td>Not established</td>
<td>Not established</td>
</tr>
<tr>
<td>TWAs</td>
<td>50 ppm TWA; 192 mg/m³ TWA</td>
<td>25 ppm TWA; 94 mg/m³ TWA</td>
<td>50 ppm TWA; 192 mg/m³ TWA</td>
<td>Not established</td>
<td>Not established</td>
</tr>
<tr>
<td>Ceilings</td>
<td>Not established</td>
<td>Not established</td>
<td>Not established</td>
<td>200 ppm Peak; 760 mg/m³ Peak</td>
<td>Not established</td>
</tr>
<tr>
<td>MAKs</td>
<td>Not established</td>
<td>Not established</td>
<td>Not established</td>
<td>50 ppm TWA MAK; 190 mg/m³ TWA MAK</td>
<td>Not established</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Result</th>
<th>NIOSH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene (108-88-3) Ceilings</td>
<td>Not established</td>
<td>300 ppm Ceiling</td>
</tr>
<tr>
<td>TWAs</td>
<td>100 ppm TWA; 375 mg/m³ TWA</td>
<td>200 ppm TWA</td>
</tr>
<tr>
<td>STELs</td>
<td>150 ppm STEL; 560 mg/m³ STEL</td>
<td>Not established</td>
</tr>
</tbody>
</table>

**Exposure Control Notations**

**China**
- Toluene (108-88-3): **Skin**: (Skin notation)

**Canada Quebec**
- Toluene (108-88-3): **Skin**: (Skin designation)

**Cyprus**
- Toluene (108-88-3): **Skin**: (Skin-potential for cutaneous absorption)

**ACGIH**
- Toluene (108-88-3): **Carcinogens**: (A4 - Not Classifiable as a Human Carcinogen)

**Germany TRGS**
- Toluene (108-88-3): **Skin**: (skin notation)

**Germany DFG**
- Toluene (108-88-3): **Pregnancy**: (no risk to embryo/fetus if exposure limits adhered to) | **Skin**: (skin notation)

**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)

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. Use explosion-proof electrical/ventilating/lighting/equipment.

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 safety goggles.

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.

Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene

BEI = Biological Exposure Indices

MAK = Maximale Arbeitsplatz Konzentration is the maximum permissible concentration

NIOSH = National Institute of Occupational Safety and Health

OSHA = Occupational Safety and Health Administration

STEL = Short Term Exposure Limits are based on 15-minute exposures

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

TWAEV = Time-Weighted Average Exposure Value

Section 9 - Physical and Chemical Properties

9.1 Information on Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Material Description</th>
<th>Physical Form</th>
<th>Appearance/Description</th>
<th>Odor Threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Form</td>
<td>Liquid</td>
<td>Black liquid with a characteristic odor.</td>
<td>Data lacking</td>
</tr>
<tr>
<td>Color</td>
<td>Black</td>
<td>Odor</td>
<td>Characteristic</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Data lacking</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>General Properties</th>
<th>Boiling Point</th>
<th>110 C(230 F)</th>
<th>Melting Point</th>
<th>Not relevant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decomposition</td>
<td>Data lacking</td>
<td>pH</td>
<td>Data lacking</td>
<td></td>
</tr>
<tr>
<td>Temperature</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific Gravity/Relative Density</td>
<td>1.2 Water=1</td>
<td>Water Solubility</td>
<td>Not miscible or difficult to mix.</td>
<td></td>
</tr>
<tr>
<td>Viscosity</td>
<td>Data lacking</td>
<td>Explosive Properties</td>
<td>Product is not explosive. However, formation of explosive air/vapor mixtures are possible.</td>
<td></td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>Data lacking</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Volatility</th>
<th>Vapor Pressure</th>
<th>29 hPa @ 20 C(68 F)</th>
<th>Vapor Density</th>
<th>Data lacking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaporation Rate</td>
<td>Data lacking</td>
<td>VOC (Wt.)</td>
<td>1.9 lbs/gal</td>
<td></td>
</tr>
<tr>
<td>VOC (Vol.)</td>
<td>224 g/L</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Flammability</th>
<th>Flash Point</th>
<th>4 C(39.2 F)</th>
<th>UEL</th>
<th>7 %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LEL</td>
<td>1.2 %</td>
<td>Autoignition</td>
<td>Data lacking</td>
</tr>
</tbody>
</table>
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

- Excess heat. Avoid flames, sparks, or other sources of ignition.

10.5 Incompatible materials

- Strong oxidizers, acids, and bases.

10.6 Hazardous decomposition products

- Carbon monoxide, carbon dioxide, and hydrocarbons.

**Section 11 - Toxicological Information**

11.1 Information on toxicological effects

<table>
<thead>
<tr>
<th>Components</th>
<th>Acute Toxicity</th>
<th>Multi-dose Toxicity</th>
<th>Blood Changes in serum composition (e.g., TP, bilirubin cholesterol)</th>
<th>Nutritional and Gross Metabolic Changes in Chemistry or Temperature</th>
<th>Other aff</th>
<th>Reproductive Effects: Maternal Effects</th>
<th>Reproductive Effects: Other effects</th>
<th>Reproductive Effects: Effects on Newborn</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Chloro-4-(trifluoromethyl) benzene (50% TO 100%)</td>
<td><strong>LD50</strong> 13 g/kg; <strong>LC50</strong> 22 g/m³</td>
<td>Inhalation-Rat TClO 500 ppm 6 Hour(s) 4 Week(s) Intermittent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toluene (5% TO 20%)</td>
<td><strong>LD50</strong> 636 mg/kg; <strong>LC50</strong> 49 g/m³ 4 Hour(s); <strong>Skin-Rabbit LD50</strong> 14100 µL/kg; <strong>Irritation</strong></td>
<td>3 mg 24 Hour(s) Severe irritation; <strong>Skin-Rabbit</strong> 500 mg Moderate irritation; <strong>Mutagen</strong> Sister chromatid exchange; <strong>Inhalation-Human</strong> 252 µg/L 19 Year(s); <strong>Reproductive</strong> Inhalation-Rat TClO</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GHS Properties</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity</td>
<td>EU/CLP Data lacking; OSHA HCS 2012 Data lacking</td>
</tr>
<tr>
<td>Aspiration Hazard</td>
<td>EU/CLP: Aspiration 1; OSHA HCS 2012: Aspiration 1</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>EU/CLP Data lacking; OSHA HCS 2012 Data lacking</td>
</tr>
</tbody>
</table>
Potential Health Effects

Inhalation
- **Acute (Immediate)**: May affect the central nervous system. Symptoms may include dizziness, drowsiness, lethargy, coma and death.
- **Chronic (Delayed)**: No data available

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)**: Material may be aspirated into the lungs during ingestion and/or subsequent vomiting. Aspiration of this material will cause severe lung injury, chemical pneumonitis, pulmonary edema or death.
- **Chronic (Delayed)**: No data available

Other
- **Chronic (Delayed)**: May cause damage to organs through prolonged or repeated exposure.

Reproductive Effects
- May cause adverse reproductive effects - such as birth defects, miscarriages or infertility based on animal data.

Key to abbreviations
- LC = Lethal Concentration
- LD = Lethal Dose
- TC = Toxic Concentration

Section 12 - Ecological Information

12.1 Toxicity
- Material data lacking.
12.2 Persistence and degradability
   Material data lacking.

12.3 Bioaccumulative potential
   Material data lacking.

12.4 Mobility in Soil
   Material data lacking.

12.5 Results of PBT and vPvB assessment
   No PBT and vPvB assessment has been conducted.

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**

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

14.6 Special precautions for user
   None specified.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
   Data lacking.

---

**Section 15 - Regulatory Information**

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

SARA Hazard Classifications
   Acute, Chronic, Fire

---

Component | CAS | MA | NJ | PA
-------|-----|----|----|----
1-Chloro-4- |     |    |    |    

Preparation Date: 30/January/2012
Revision Date: 23/December/2014

Page 11 of 18
<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>Canada DSL</th>
<th>Canada NDSL</th>
<th>China</th>
<th>EU EINECS</th>
<th>EU ELNICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Chloro-4-(trifluoromethyl) benzene</td>
<td>98-56-6</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>Japan ENCS</th>
<th>Korea KECL</th>
<th>TSCA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Chloro-4-(trifluoromethyl) benzene</td>
<td>98-56-6</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Australia**

**Labor**

*Australia - Work Health and Safety Regulations - Hazardous Substances Requiring Health Monitoring*
- 1-Chloro-4-(trifluoromethyl) benzene
- Toluene

*Australia - High Volume Industrial Chemicals List*
- 1-Chloro-4-(trifluoromethyl) benzene
- Toluene

*Australia - List of Designated Hazardous Substances - Classification*
- 1-Chloro-4-(trifluoromethyl) benzene
- Toluene

**Environment**

*Australia - National Pollutant Inventory (NPI) Substance List*
- 1-Chloro-4-(trifluoromethyl) benzene
- Toluene

*Australia - Ozone Protection Act - Scheduled Substances*
- 1-Chloro-4-(trifluoromethyl) benzene
- Toluene

*Australia - Priority Existing Chemical Program*
- 1-Chloro-4-(trifluoromethyl) benzene
- Toluene

**Belgium**

**Labor**

*Belgium - Substances and Preparations - Carcinogens and Mutagens*
- 1-Chloro-4-(trifluoromethyl) benzene
- Toluene
## Bulgaria

### Environment

**Bulgaria - Air Quality - Maximum Admissible Hazardous Contaminant Levels - 24 Hour**
- 1-Chloro-4-(trifluoromethyl) benzene: 98-56-6, Not Listed
- Toluene: 108-88-3, 0.25 mg/m³ MAHCL

**Bulgaria - Air Quality - Maximum Admissible Hazardous Contaminant Levels - 30 Minute**
- 1-Chloro-4-(trifluoromethyl) benzene: 98-56-6, Not Listed
- Toluene: 108-88-3, Not Listed

**Bulgaria - Air Quality - Maximum Admissible Hazardous Contaminant Levels - Annual**
- 1-Chloro-4-(trifluoromethyl) benzene: 98-56-6, Not Listed
- Toluene: 108-88-3, Not Listed

## Canada

### Labor

**Canada - WHMIS - Classifications of Substances**
- 1-Chloro-4-(trifluoromethyl) benzene: 98-56-6, Not Listed
- Toluene: 108-88-3, B2, D2A, D2B

**Canada - WHMIS - Ingredient Disclosure List**
- 1-Chloro-4-(trifluoromethyl) benzene: 98-56-6, Not Listed
- Toluene: 108-88-3, 1 %

### Environment

**Canada - CEPA - Priority Substances List**
- 1-Chloro-4-(trifluoromethyl) benzene: 98-56-6, Not Listed
- Toluene: 108-88-3, Priority Substance List 1 (substance not considered toxic)

### Other

**Canada - Accelerated Reduction/Elimination of Toxics (ARET)**
- 1-Chloro-4-(trifluoromethyl) benzene: 98-56-6, Not Listed
- Toluene: 108-88-3, Not Listed

## China

### Other

**China - Annex I & II - Controlled Chemicals Lists**
- 1-Chloro-4-(trifluoromethyl) benzene: 98-56-6, Not Listed
- Toluene: 108-88-3, Not Listed

## Denmark

### Environment

**Denmark - List of Undesirable Substances - Product Groups/Function**
- 1-Chloro-4-(trifluoromethyl) benzene: 98-56-6, Not Listed
  - Solvents in a wide range of products including paints, coatings and cooling lubricants (listed under Organic solvents)
- Toluene: 108-88-3, Not Listed
Europe

Other

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification
- 1-Chloro-4-(trifluoromethyl) benzene 98-56-6 Not Listed
  • Toluene 108-88-3 F; R11 Xi; R38 Xn; R48/20-65 Repr.Cat.3; R63 R67

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Concentration Limits
- 1-Chloro-4-(trifluoromethyl) benzene 98-56-6 Not Listed
  • Toluene 108-88-3 Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Labelling
- 1-Chloro-4-(trifluoromethyl) benzene 98-56-6 Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Notes - Substances and Preparations
- 1-Chloro-4-(trifluoromethyl) benzene 98-56-6 Not Listed
  • Toluene 108-88-3 Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases
- 1-Chloro-4-(trifluoromethyl) benzene 98-56-6 Not Listed
  • Toluene 108-88-3 S:(2)-36/37-46-62

Germany

Labor

Germany - Immission Control - Qualifying Quantities for Major Accident Prevention
- 1-Chloro-4-(trifluoromethyl) benzene 98-56-6 Not Listed
  • Toluene 108-88-3 Not Listed

Germany - Immission Control - Qualifying Quantities for Safety Reporting
- 1-Chloro-4-(trifluoromethyl) benzene 98-56-6 Not Listed
  • Toluene 108-88-3 Not Listed

Germany - TRGS 505 - Specific Lead Regulations
- 1-Chloro-4-(trifluoromethyl) benzene 98-56-6 Not Listed
  • Toluene 108-88-3 Not Listed

Germany - TRGS 511 - Specific Ammonium Nitrate Regulations
- 1-Chloro-4-(trifluoromethyl) benzene 98-56-6 Not Listed
  • Toluene 108-88-3 Not Listed

Environment

Germany - TA Luft - Types and Classes
- 1-Chloro-4-(trifluoromethyl) benzene 98-56-6 Not Listed
  • Toluene 108-88-3 Not Listed

Germany - TA Luft - Emission Limits for Carcinogenic Substances
- 1-Chloro-4-(trifluoromethyl) benzene 98-56-6 Not Listed
  • Toluene 108-88-3 Not Listed

Germany - TA Luft - Emission Limits for Fibers
- 1-Chloro-4-(trifluoromethyl) benzene 98-56-6 Not Listed
  • Toluene 108-88-3 Not Listed
### Germany - TA Luft - Emission Limits for Inorganic Dusts
- 1-Chloro-4-(trifluoromethyl) benzene: 98-56-6, Not Listed
- Toluene: 108-88-3, Not Listed

### Germany - TA Luft - Emission Limits for Inorganic Gases
- 1-Chloro-4-(trifluoromethyl) benzene: 98-56-6, Not Listed
- Toluene: 108-88-3, Not Listed

### Germany - TA Luft - Emission Limits for Organic Substances
- 1-Chloro-4-(trifluoromethyl) benzene: 98-56-6, Not Listed
- Toluene: 108-88-3, Not Listed

### Germany - Water Classification (VwVwS) - Annex 1
- 1-Chloro-4-(trifluoromethyl) benzene: 98-56-6, Not Listed
- Toluene: 108-88-3, Not Listed

### Germany - Water Classification (VwVwS) - Annex 2 - Water Hazard Classes
- 1-Chloro-4-(trifluoromethyl) benzene: 98-56-6, ID Number 1112, hazard class 2 - hazard to waters
- Toluene: 108-88-3, ID Number 194, hazard class 2 - hazard to waters

### Germany - Water Classification (VwVwS) - Annex 3
- 1-Chloro-4-(trifluoromethyl) benzene: 98-56-6, Not Listed
- Toluene: 108-88-3, Not Listed

### United States - Labor

#### U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals
- 1-Chloro-4-(trifluoromethyl) benzene: 98-56-6, Not Listed
- Toluene: 108-88-3, Not Listed

#### U.S. - OSHA - Specifically Regulated Chemicals
- 1-Chloro-4-(trifluoromethyl) benzene: 98-56-6, Not Listed
- Toluene: 108-88-3, Not Listed

### Environment

#### U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants
- 1-Chloro-4-(trifluoromethyl) benzene: 98-56-6, Not Listed
- Toluene: 108-88-3

#### U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities
- 1-Chloro-4-(trifluoromethyl) benzene: 98-56-6, Not Listed
- Toluene: 108-88-3, 1000 lb final RQ; 454 kg final RQ

#### U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities
- 1-Chloro-4-(trifluoromethyl) benzene: 98-56-6, Not Listed
- Toluene: 108-88-3, Not Listed

#### U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs
- 1-Chloro-4-(trifluoromethyl) benzene: 98-56-6, Not Listed
- Toluene: 108-88-3, Not Listed
U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs
- 1-Chloro-4-(trifluoromethyl) benzene 98-56-6 Not Listed
- Toluene 108-88-3 Not Listed

U.S. - CERCLA/SARA - Section 313 - Emission Reporting
- 1-Chloro-4-(trifluoromethyl) benzene 98-56-6 Not Listed
- Toluene 108-88-3 Not Listed

U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing
- 1-Chloro-4-(trifluoromethyl) benzene 98-56-6 Not Listed
- Toluene 108-88-3 Not Listed

U.S. - RCRA (Resource Conservation & Recovery Act) - Basis for Listing - Appendix VII
- 1-Chloro-4-(trifluoromethyl) benzene 98-56-6 Not Listed
- Toluene 108-88-3 Included in waste streams: F005, F024, F025, F039, K015, K036, K037, K149, K151

U.S. - RCRA (Resource Conservation & Recovery Act) - Constituents for Detection Monitoring
- 1-Chloro-4-(trifluoromethyl) benzene 98-56-6 Not Listed
- Toluene 108-88-3

U.S. - RCRA (Resource Conservation & Recovery Act) - Hazardous Constituents - Appendix VIII to 40 CFR 261
- 1-Chloro-4-(trifluoromethyl) benzene 98-56-6 Not Listed
- Toluene 108-88-3 waste number U220

U.S. - RCRA (Resource Conservation & Recovery Act) - List for Hazardous Constituents
- 1-Chloro-4-(trifluoromethyl) benzene 98-56-6 Not Listed
- Toluene 108-88-3

U.S. - RCRA (Resource Conservation & Recovery Act) - Phase 4 LDR Rule - Universal Treatment Standards
- 1-Chloro-4-(trifluoromethyl) benzene 98-56-6 Not Listed
- Toluene 108-88-3 0.080 mg/L (wastewater); 10 mg/kg (nonwastewater)

U.S. - RCRA (Resource Conservation & Recovery Act) - TSD Facilities Ground Water Monitoring
- 1-Chloro-4-(trifluoromethyl) benzene 98-56-6 Not Listed
- Toluene 108-88-3

U.S. - RCRA (Resource Conservation & Recovery Act) - U Series Wastes - Acutely Toxic Wastes & Other Hazardous Characteristics
- 1-Chloro-4-(trifluoromethyl) benzene 98-56-6 Not Listed
- Toluene 108-88-3 waste number U220

United States - California

Environment

U.S. - California - Proposition 65 - Carcinogens List
- 1-Chloro-4-(trifluoromethyl) benzene 98-56-6 Not Listed
- Toluene 108-88-3 Not Listed

U.S. - California - Proposition 65 - Developmental Toxicity
- 1-Chloro-4-(trifluoromethyl) benzene 98-56-6 Not Listed
developmental toxicity, initial date 1/1/91
U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

• 1-Chloro-4-(trifluoromethyl) benzene 98-56-6 Not Listed
  7000 µg/day MADL (level represents absorbed dose)
• Toluene 108-88-3 Not Listed

U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)

• 1-Chloro-4-(trifluoromethyl) benzene 98-56-6 Not Listed
• Toluene 108-88-3 Not Listed

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

• 1-Chloro-4-(trifluoromethyl) benzene 98-56-6 Not Listed
  female reproductive toxicity, initial date 8/7/09
• Toluene 108-88-3 Not Listed

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

• 1-Chloro-4-(trifluoromethyl) benzene 98-56-6 Not Listed
• Toluene 108-88-3 Not Listed

United States - Pennsylvania

Labor

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

• 1-Chloro-4-(trifluoromethyl) benzene 98-56-6 Not Listed
• Toluene 108-88-3 Not Listed

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

• 1-Chloro-4-(trifluoromethyl) benzene 98-56-6 Not Listed
• Toluene 108-88-3 Not Listed

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out.

15.3 Other Information

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Section 16 - Other Information

Last Revision Date 23/December/2014
Preparation Date 30/January/2012

Disclaimer/Statement of Liability

The information contained herein is based on data considered accurate which has been obtained from other companies and organizations. However, no warranty or representation is expressed or implied that the information, is accurate, complete or representative. Firestone Building Products Company, LLC assumes no responsibility for injury to the buyer, the buyer's employees, or any third persons, if reasonable safety procedures are not followed. Additionally, Firestone Building Products Company assumes no responsibility for injury to buyer, the buyer's employees, or any third persons caused by abnormal use of this material, even if reasonable safety procedures are followed.

Key to abbreviations

NDA = No data available