Safety Data Sheet GenFlex Roofing Systems

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

1.1 Product identifier

Product Name • **GenPrime Primer**

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 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
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
Hazardous to the aquatic environment Acute 1 - H400
Hazardous to the aquatic environment Chronic 1 - H410

DSD/DPD • Highly Flammable (F)
Irritant (Xi)
Harmful (Xn)
Substances Toxic To Reproduction - Category 3
Dangerous to the Environment (N)
R11, R38, R48/20, R63, R65, R67, R50, R53

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.
- H400 - Very toxic to aquatic life
- H410 - Very toxic 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.
- P264 - Wash thoroughly after handling.
- P271 - Use only outdoors or in a well-ventilated area.
- P273 - Avoid release to the environment.
- 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.
- 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.
- P362 - Take off contaminated clothing and wash before reuse.
- 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.
- P314 - Get medical advice/attention if you feel unwell.
- P391 - Collect spillage.

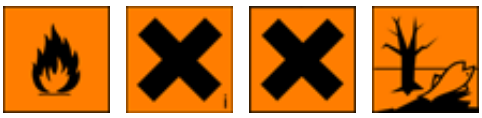
Storage/Disposal

- 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.
- R63 - Possible risk of harm to the unborn child.
- R67 - Vapours may cause drowsiness and dizziness.
- R50 - Very toxic to aquatic organisms.
- R53 - May cause long-term adverse effects in the aquatic environment.

Safety phrases

- S9 - Keep container in a well ventilated place
- S22 - Do not breathe dust.
- S23 - Do not breathe gas/fumes/vapour/spray.
- S16 - Keep away from sources of ignition - No Smoking.
- S37 - Wear suitable gloves.
- S57 - Use appropriate containment to avoid environmental contamination.

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
  Acute Toxicity Oral 4 - H302
  Aspiration 1 - H304
  Skin Irritation 2 - H315
  Eye Irritation 2 - H319
  Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects - H336
  Reproductive Toxicity 2 - H361

2.2 Label elements

OSHA HCS 2012

DANGER

Hazard statements
- Highly flammable liquid and vapour - H225
  Harmful if swallowed - H302
  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

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
  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
  In case of inadequate ventilation wear respiratory protection. - P285

Response
- In case of fire: Use appropriate media for extinction. - P370+P378
  IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. - P303+P361+P353
  Specific treatment, see supplemental first aid information. - P321
  Take off contaminated clothing and wash before reuse. - P362
  If skin irritation occurs: Get medical advice/attention. - P332+P313
  Wash with plenty of soap and water. - P352
  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
  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
Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. - P501

Supplemental information
- 50 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).

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**
Heptane	**CAS:**142-82-5 **EC Number:**205-563-8	25% TO 50%	Inhalation-Rat LC50 • 103 g/m³ 4 Hour(s)	**EU DSD/DPD:** Annex I: F; R11 Xi; R38 N; R50-53 Xn; R65 R67 **EU CLP:** Annex VI: Flam. Liq. 2, H225; Asp. Tox. 1, H304; Skin Irrit. 2, H315; STOT SE 3: Narc., H336; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 **OSHA HCS 2012:** Flam. Liq. 2; Skin Irrit. 2; Eye Irrit. 2; Asp. Tox. 1; STOT SE 3: Narc.	NDA
			Ingestion/Oral-Rat	**EU DSD/DPD:** Annex I: F; R11 Xi; R38 Xn; R48/20-65 Repr.Cat.3; R63 R67	

Toluene	**CAS:**108-88-3 **EC Number:**203-625-9	25% TO 50%	LD50 • 636 mg/kg Inhalation-Rat LC50 • 49 g/m³ 4 Hour(s) Skin-Rabbit LD50 • 14100 µL/kg	**EU CLP:** Annex VI: Flam. Liq. 2, H225; Repr. 2, H361d; Asp. Tox. 1, H304; STOT RE 2, H373; Skin Irrit. 2, H315; STOT SE 3: Narc., 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

See Section 11 for Toxicological Information.

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
- Remove and isolate contaminated clothing. 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
- 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.

Hazardous Combustion Products
- Oxides of carbon, nitrogen and hydrocarbons, hydrogen bromide.
Irritating and/or toxic gases or fumes may be generated by thermal decomposition or combustion.

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.
LARGE FIRES: Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
LARGE FIRES: Cool containers with flooding quantities of water until well after fire is out.

Stop leak if safe to do so.
If leak cannot be stopped, and if there is no risk to the surrounding area, let the fire burn itself out.

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions

- 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

Exposure Limits/Guidelines						
	Result	**ACGIH**	**Belgium**	**Canada Alberta**	**Canada British Columbia**	**Canada Manitoba**
Toluene (108-88-3)	STELs	Not established	100 ppm STEL; 384 mg/m3 STEL	Not established	Not established	Not established
	TWAs	20 ppm TWA	22 ppm TWA; 77 mg/m3 TWA	50 ppm TWA; 188 mg/m3 TWA	20 ppm TWA	20 ppm TWA
Heptane (142-82-5)	STELs	500 ppm STEL (listed under Heptane, all isomers)	500 ppm STEL; 2085 mg/m3 STEL	500 ppm STEL; 2050 mg/m3 STEL	500 ppm STEL	500 ppm STEL (listed under Heptane, all isomers)
	TWAs	400 ppm TWA (listed under Heptane, all isomers)	400 ppm TWA; 1664 mg/m3 TWA	400 ppm TWA; 1640 mg/m3 TWA	400 ppm TWA	400 ppm TWA (listed under Heptane, all isomers)

Exposure Limits/Guidelines (Con't.)						
	Result	**Canada New Brunswick**	**Canada Northwest Territories**	**Canada Nova Scotia**	**Canada Nunavut**	**Canada Ontario**
Toluene (108-88-3)	TWAs	50 ppm TWA; 188 mg/m3 TWA	100 ppm TWA; 375 mg/m3 TWA	20 ppm TWA	100 ppm TWA; 375 mg/m3 TWA	20 ppm TWA
	STELs	Not established	150 ppm STEL; 560 mg/m3 STEL	Not established	150 ppm STEL; 560 mg/m3 STEL	Not established
Heptane (142-82-5)	STELs	500 ppm STEL; 2050 mg/m3 STEL	500 ppm STEL; 2049 mg/m3 STEL	500 ppm STEL (listed under Heptane, all isomers)	500 ppm STEL; 2049 mg/m3 STEL	500 ppm STEL (listed under Heptane, all isomers)
	TWAs	400 ppm TWA; 1640 mg/m3 TWA	400 ppm TWA; 1640 mg/m3 TWA	400 ppm TWA (listed under Heptane, all isomers)	400 ppm TWA; 1640 mg/m3 TWA	400 ppm TWA

Exposure Limits/Guidelines (Con't.)						
	Result	**Canada Quebec**	**Canada Saskatchewan**	**Canada Yukon**	**Cyprus**	**Denmark**
Toluene (108-88-3)	TWAs	50 ppm TWAEV; 188 mg/m3 TWAEV	50 ppm TWA	100 ppm TWA; 375 mg/m3 TWA	50 ppm TWA; 192 mg/m3 TWA	25 ppm TWA; 94 mg/m3 TWA
	STELs	Not established	Not established	150 ppm STEL; 560 mg/m3 STEL	100 ppm STEL; 384 mg/m3 STEL	Not established
Heptane (142-82-5)	TWAs	400 ppm TWAEV; 1640 mg/m3 TWAEV	400 ppm TWA	400 ppm TWA; 1600 mg/m3 TWA	500 ppm TWA; 2085 mg/m3 TWA	200 ppm TWA; 820 mg/m3 TWA
	STELs	500 ppm STEV; 2050 mg/m3 STEV	Not established	500 ppm STEL; 2000 mg/m3 STEL	Not established	Not established

Exposure Limits/Guidelines (Con't.)						
	Result	**Europe**	**Germany DFG**	**Germany TRGS**	**NIOSH**	**OSHA**
Toluene (108-88-3)	STELs	100 ppm STEL; 384 mg/m3 STEL	Not established	Not established	150 ppm STEL; 560 mg/m3 STEL	Not established
	TWAs	50 ppm TWA; 192 mg/m3 TWA	Not established	50 ppm TWA AGW (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed, exposure factor 4); 190 mg/m3 TWA AGW (The risk of damage to the embryo or fetus can	100 ppm TWA; 375 mg/m3 TWA	200 ppm TWA

				be excluded when AGW and BGW values are observed, exposure factor 4)		
	Ceilings	Not established	200 ppm Peak; 760 mg/m3 Peak	Not established	Not established	300 ppm Ceiling
	MAKs	Not established	50 ppm TWA MAK; 190 mg/m3 TWA MAK	Not established	Not established	Not established
Heptane (142-82-5)	TWAs	Not established	Not established	500 ppm TWA AGW (all isomers, exposure factor 1); 2100 mg/m3 TWA AGW (all isomers, exposure factor 1)	85 ppm TWA; 350 mg/m3 TWA	500 ppm TWA; 2000 mg/m3 TWA
	Ceilings	Not established	500 ppm Peak; 2100 mg/m3 Peak	Not established	440 ppm Ceiling (15 min); 1800 mg/m3 Ceiling (15 min)	Not established
	MAKs	Not established	500 ppm TWA MAK; 2100 mg/m3 TWA MAK	Not established	Not established	Not established

Exposure Control Notations

Cyprus

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

Germany TRGS

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

Germany DFG

•Heptane (142-82-5): **Pregnancy:** (classification not yet possible) | **Pregnancy:** (no risk to embryo/fetus if exposure limits adhered to) | **Skin:** (skin notation)

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. 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/MSHA 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

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

TWAEV = Time-Weighted Average Exposure Value

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

Section 9 - Physical and Chemical Properties

9.1 Information on Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Appearance/Description	Black liquid with a characteristic odor.
Color	Black	Odor	Characteristic
Odor Threshold	Data lacking		
General Properties			
Boiling Point	98 C(208.4 F)	Melting Point	Data lacking
Decomposition Temperature	Data lacking	pH	Data lacking
Specific Gravity/Relative Density	0.791 Water=1	Density	6.58 lbs/gal
Water Solubility	Immiscible	Viscosity	Data lacking
Explosive Properties	Data lacking	Oxidizing Properties:	Data lacking
Volatility			
Vapor Pressure	36 mmHg (torr) @ 20 C(68 F)	Vapor Density	Data lacking
Evaporation Rate	Data lacking	VOC (Vol.)	660 g/L
Flammability			
Flash Point	-4 C(24.8 F)	UEL	7 %
LEL	1.1 %	Autoignition	Data lacking
Flammability (solid, gas)	Flammable Liquid.		
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, or other sources of ignition.

10.5 Incompatible materials

- No data available

10.6 Hazardous decomposition products

- Oxides of carbon, nitrogen and hydrocarbons, hydrogen bromide (thermal degradation products).

Section 11 - Toxicological Information

11.1 Information on toxicological effects

Component Name	CAS	Data
Heptane (25% TO 50%)	142-82-5	**Acute Toxicity:** ihl-rat LC50:103 gm/m3/4H
Toluene (25% TO 50%)	108-88-3	**Acute Toxicity:** orl-rat LD50:636 mg/kg; ihl-rat LC50:49 gm/m3/4H; skn-rbt LD50:14100 uL/kg; **Irritation:** eye-rbt 100 mg/30S rinse MLD; skn-rbt 435 mg MLD; **Reproductive:** ihl-rat TCLo:1500 ppm (7-20D preg)

GHS Properties	Classification
Acute toxicity	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Acute Toxicity - Oral 4 - ATEmix= 636 mg/kg(orl)
Aspiration Hazard	**EU/CLP** • Aspiration 1 **OSHA HCS 2012** • Aspiration 1
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** • Classification criteria not met
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** • 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 2

Target Organs
- Central Nervous System (CNS)

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

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)
- Harmful if swallowed. 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)
- Chronic exposure to hexane may produce peripheral neuropathy (motor sensory) and CNS abnormalities.

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
MLD = Mild
TC = Toxic Concentration

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

- 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

	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	Potential Marine Pollutant
IMO/IMDG	UN1133	ADHESIVES	3	II	NDA
ADN	UN1133	ADHESIVES	3	II	NDA

ADR/RID	UN1133	ADHESIVES, ENVIRONMENTALLY HAZARDOUS	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.

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**
Heptane	142-82-5	Yes	Yes	Yes
Toluene	108-88-3	Yes	Yes	Yes

Inventory						
Component	**CAS**	**Canada DSL**	**Canada NDSL**	**EU EINECS**	**EU ELNICS**	**TSCA**
Heptane	142-82-5	Yes	No	Yes	No	Yes
Toluene	108-88-3	Yes	No	Yes	No	Yes

Belgium

Labor

Belgium - Substances and Preparations - Carcinogens and Mutagens

• Heptane	142-82-5	Not Listed
• Toluene	108-88-3	Not Listed

Canada

Labor

Canada - WHMIS - Classifications of Substances

• Heptane	142-82-5	B2, D2B
• Toluene	108-88-3	B2, D2A, D2B

Canada - WHMIS - Ingredient Disclosure List

• Heptane	142-82-5	1 %
• Toluene	108-88-3	1 %

Environment

Canada - 2004 NPRI (National Pollutant Release Inventory)

• Heptane	142-82-5	Not Listed
• Toluene	108-88-3	Part 1, Group 1 Substance; Part 5 Substance

Canada - 2005 NPRI (National Pollutant Release Inventory)

• Heptane	142-82-5	Not Listed

• Toluene	108-88-3	Part 1, Group 1 Substance; Part 5 Substance

Canada - CEPA - Greenhouse Gases Subject to Mandatory Reporting

• Heptane	142-82-5	Not Listed
• Toluene	108-88-3	Not Listed

Canada - CEPA - Priority Substances List

• Heptane	142-82-5	Not Listed
• Toluene	108-88-3	Priority Substance List 1 (substance not considered toxic)

Other

Canada - Accelerated Reduction/Elimination of Toxics (ARET)

• Heptane	142-82-5	Not Listed
• Toluene	108-88-3	Not Listed

Canada New Brunswick

Environment

Canada - New Brunswick - Ozone Depleting Substances - Schedule A

• Heptane	142-82-5	Not Listed
• Toluene	108-88-3	Not Listed

Canada - New Brunswick - Ozone Depleting Substances - Schedule B

• Heptane	142-82-5	Not Listed
• Toluene	108-88-3	Not Listed

Denmark

Environment

Denmark - List of Undesirable Substances - Product Groups/Function

• Heptane	142-82-5	Not Listed
• Toluene	108-88-3	Solvents in a wide range of products including paints, coatings and cooling lubricants (listed under Organic solvents)

Europe

Other

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

• Heptane	142-82-5	F; R11 Xi; R38 N; R50-53 Xn; R65 R67
• 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

• Heptane	142-82-5	Not Listed
• Toluene	108-88-3	Not Listed

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

• Heptane	142-82-5	F Xn N R:11-38-65-67-50/53 S:(2)-9-16-29-33-60-61-62

• Toluene	108-88-3	F Xn R:11-38-48/20-63-65-67 S:(2)-36/37-46-62

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

• Heptane	142-82-5	C
• Toluene	108-88-3	Not Listed

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

• Heptane	142-82-5	S:(2)-9-16-29-33-60-61-62
• Toluene	108-88-3	S:(2)-36/37-46-62

Germany

Labor

Germany - Immission Control - Qualifying Quantities for Major Accident Prevention

• Heptane	142-82-5	Not Listed
• Toluene	108-88-3	Not Listed

Germany - Immission Control - Qualifying Quantities for Safety Reporting

• Heptane	142-82-5	Not Listed
• Toluene	108-88-3	Not Listed

Germany - TRGS 505 - Specific Lead Regulations

• Heptane	142-82-5	Not Listed
• Toluene	108-88-3	Not Listed

Germany - TRGS 511 - Specific Ammonium Nitrate Regulations

• Heptane	142-82-5	Not Listed
• Toluene	108-88-3	Not Listed

Environment

Germany - TA Luft - Types and Classes

• Heptane	142-82-5	Not Listed
• Toluene	108-88-3	Not Listed

Germany - TA Luft - Emission Limits for Carcinogenic Substances

• Heptane	142-82-5	Not Listed
• Toluene	108-88-3	Not Listed

Germany - TA Luft - Emission Limits for Fibers

• Heptane	142-82-5	Not Listed
• Toluene	108-88-3	Not Listed

Germany - TA Luft - Emission Limits for Inorganic Dusts

• Heptane	142-82-5	Not Listed
• Toluene	108-88-3	Not Listed

Germany - TA Luft - Emission Limits for Inorganic Gases

• Heptane	142-82-5	Not Listed
• Toluene	108-88-3	Not Listed

Germany - TA Luft - Emission Limits for Organic Substances

• Heptane	142-82-5	Not Listed
• Toluene	108-88-3	Not Listed

Germany - Water Classification (VwVwS) - Annex 1

• Heptane	142-82-5	Not Listed
• Toluene	108-88-3	Not Listed

Germany - Water Classification (VwVwS) - Annex 2 - Water Hazard Classes

• Heptane	142-82-5	ID Number 120, 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

• Heptane	142-82-5	ID Number 120, hazard class 2 - hazard to waters
• Toluene	108-88-3	Not Listed

United States

Labor

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

• Heptane	142-82-5	Not Listed
• Toluene	108-88-3	Not Listed

U.S. - OSHA - Specifically Regulated Chemicals

• Heptane	142-82-5	Not Listed
• Toluene	108-88-3	Not Listed

Environment

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

• Heptane	142-82-5	Not Listed
• Toluene	108-88-3	

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

• Heptane	142-82-5	Not Listed
• Toluene	108-88-3	1000 lb final RQ; 454 kg final RQ

U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities

• Heptane	142-82-5	Not Listed
• Toluene	108-88-3	Not Listed

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

• Heptane	142-82-5	Not Listed
• Toluene	108-88-3	Not Listed

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

• Heptane	142-82-5	Not Listed
• Toluene	108-88-3	Not Listed

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

• Heptane	142-82-5	Not Listed
• Toluene	108-88-3	1.0 % de minimis concentration

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

• Heptane	142-82-5	Not Listed
• Toluene	108-88-3	Not Listed

U.S. - RCRA (Resource Conservation & Recovery Act) - Basis for Listing - Appendix VII

• Heptane	142-82-5	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

• Heptane	142-82-5	Not Listed
• Toluene	108-88-3	

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

• Heptane	142-82-5	Not Listed
• Toluene	108-88-3	waste number U220

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

• Heptane	142-82-5	Not Listed
• Toluene	108-88-3	

U.S. - RCRA (Resource Conservation & Recovery Act) - Phase 4 LDR Rule - Universal Treatment Standards

• Heptane	142-82-5	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

• Heptane	142-82-5	Not Listed
• Toluene	108-88-3	

U.S. - RCRA (Resource Conservation & Recovery Act) - U Series Wastes - Acutely Toxic Wastes & Other Hazardous Characteristics

• Heptane	142-82-5	Not Listed
• Toluene	108-88-3	waste number U220

United States - California

Environment

U.S. - California - Proposition 65 - Carcinogens List

• Heptane	142-82-5	Not Listed
• Toluene	108-88-3	Not Listed

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

• Heptane	142-82-5	Not Listed
• Toluene	108-88-3	developmental toxicity, initial date 1/1/91

U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

• Heptane	142-82-5	Not Listed
• Toluene	108-88-3	7000 µg/day MADL (level represents absorbed dose)

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

• Heptane	142-82-5	Not Listed
• Toluene	108-88-3	Not Listed

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

• Heptane	142-82-5	Not Listed

• Toluene	108-88-3	female reproductive toxicity, initial date 8/7/09

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

• Heptane	142-82-5	Not Listed
• Toluene	108-88-3	Not Listed

United States - Pennsylvania

Labor

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

• Heptane	142-82-5	Not Listed
• Toluene	108-88-3	

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

• Heptane	142-82-5	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
- 02/January/2014

Preparation Date
- 10/April/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