GenTite RRS **Safety Data Sheet**

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

1.1 Product identifier

Product Name

All Purpose Primer

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

Relevant identified use(s)

Adhesive

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

aentitemsds@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 Chronic 2 - H411

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, R51/53

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.

H411 - 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.

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 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.

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 • P233 - Keep container tightly closed.

P403+P235 - Store in a well-ventilated place. Keep cool.

P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

DSD/DPD









Risk phrases • R11 - Highly flammable.

R38 - Irritating to skin.

R48/20 - Harmful: danger of serious damage to health by prolonged exposure through

R63 - Possible risk of harm to the unborn child.

R65 - Harmful: may cause lung damage if swallowed.

R67 - Vapours may cause drowsiness and dizziness.

R51/53 - Toxic to aquatic organisms, 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.

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 Eve Irritation 2 - H319

Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation - H335

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 May cause respiratory irritation - H335

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

Avoid breathing mist/vapours/spray. - P261 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): 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

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 ŚWALLOWED: 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 .

Keep container tightly closed. - P233

Store in a well-ventilated place. Keep cool. - P403+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

 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	Chemical Name Identifiers % LD50/LC50 Classifications According to Regulation/Direction				Comments	
Light aliphatic	CAS:64742- 89-8 EINECS:265- 192-2	40% TO 60%	NDA	EU DSD/DPD: Annex VI, Table 3.2 - Xn R65, R67; Xi, R38; N; R51/53 EU CLP: Annex VI, Table 3.1 - Flam. Liq. 2, H225; Skin Irrit. 2; H315; Asp. Tox. 1, H304; STOT SE 3: Narc., H336; Aquatic Chronic 2, H411 OSHA HCS 2012: Flam Liq. 2; Eye Irrit. 2; Skin Irrit. 2; Asp. Tox. 1; STOT SE 3: Narc. & Resp. Irrit.	NDA	

Toluene	CAS:108-88-3 EINECS:203- 625-9	20% TO 40%	Ingestion/Oral-Rat LD50 • 636 mg/kg Inhalation-Rat LC50 • 49 g/m³ 4 Hour(s) Skin-Rabbit LD50 • 14100 µL/kg	EU DSD/DPD: Annex VI, Table 3.2 - F; R11; Repr. 3; R63; Xn; R48/20-65; Xi; R38; R67 EU CLP: Annex VI, Table 3.1 - 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; Repr. 2; Acute Tox. 4 (Oral); STOT SE 3: Narc.; Asp. Tox. 1; Eye Irrit. 2; Skin Irrit. 2	NDA
Silica, amorphous fumed	CAS :112945-52-5	< 5%	Ingestion/Oral-Rat LD50 • 3160 mg/kg	EU DSD/DPD: Not Classified EU CLP: Not Classified OSHA HCS 2012: Not Classified	NDA

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

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

Carbon oxides, nitrogen oxides, silicon oxides.

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

Preparation Date: 13/December/2010 Format: EU CLP/REACH Language: English (US)
Revision Date: 11/March/2014 WHMIS, EU CLP, EU DSD/DPD, OSHA HCS 2012

8.1 Control parameters

			Exposure Limits	s/Guidelines			
	Result	ACGIH	Australia	Belgium	Canada Alberta	Canada British Columbia	
Toluene	STELs	Not established	150 ppm STEL; 574 mg/m3 STEL	100 ppm STEL; 384 mg/m3 STEL	Not established	Not established	
(108-88-3)	TWAs	20 ppm TWA	50 ppm TWA; 191 mg/m3 TWA	22 ppm TWA; 77 mg/m3 TWA	50 ppm TWA; 188 mg/m3 TWA	20 ppm TWA	
		Ex	cposure Limits/Gu	idelines (Con't.)			
	Result	Canada Manitoba	Canada New Brunswick	Canada Northwest Territories	Canada Nova Scotia	Canada Nunavut	
Toluene	TWAs	20 ppm TWA	50 ppm TWA; 188 mg/m3 TWA	100 ppm TWA; 375 mg/m3 TWA	20 ppm TWA	100 ppm TWA; 375 mg/m3 TWA	
(108-88-3)	STELs	Not established	Not established	150 ppm STEL; 560 mg/m3 STEL	Not established	150 ppm STEL; 560 mg/m3 STEL	
	,	Ex	cposure Limits/Gu	idelines (Con't.)	•		
	Result	Canada Ontario	Canada Quebec	Canada Saskatchewan	Canada Yukon	China	
Toluene	STELs	Not established	Not established	Not established	150 ppm STEL; 560 mg/m3 STEL	100 mg/m3 STEL	
(108-88-3)	TWAs	20 ppm TWA	50 ppm TWAEV; 188 mg/m3 TWAEV	50 ppm TWA	100 ppm TWA; 375 mg/m3 TWA	50 mg/m3 TWA	
		Ex	cposure Limits/Gu	idelines (Con't.)	•	•	
	Result	Cyprus	Denmark	Europe	Germany DFG	Germany TRGS	
	STELs	100 ppm STEL; 384 mg/m3 STEL	Not established	100 ppm STEL; 384 mg/m3 STEL	Not established	Not established	
Toluene (108-88-3)	TWAs	50 ppm TWA; 192 mg/m3 TWA	25 ppm TWA; 94 mg/m3 TWA	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 be excluded when AGW and BGW values are observed, exposure factor 4)	
	Ceilings	Not established	Not established	Not established	200 ppm Peak; 760 mg/m3 Peak	Not established	
MAKs		Not established	Not established	Not established	50 ppm TWA MAK; 190 mg/m3 TWA MAK	Not established	
		Ex	cposure Limits/Gu	idelines (Con't.)			
		Result	NIOSH	· , · · · · · · · · · · · · · · · · · ·			
Ceilings			Not established		300 ppm Ceiling		
Toluene (108-88-3)	$\mathbf{I} = \mathbf{I} \mathbf{m} \mathbf{d} / \mathbf{m} \mathbf{x} + \mathbf{I} \mathbf{v} / \mathbf{\Delta}$						

STELs 150 ppm STEL; 560 mg/m3 STEL 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

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

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

Skin/Body

Wear safety goggles.

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

Maximale Arbeitsplatz Konzentration is the maximum permissible

MAK = 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	Translucent to clear liquid with characteristic solvent odor.
Color	Translucent to clear.	Odor	Characteristic solvent.
Odor Threshold	Data lacking		
General Properties			
Boiling Point	185 F(85 C)	Melting Point	Data lacking
Decomposition Temperature	Data lacking	рН	Unknown
Specific Gravity/Relative Density	0.75 to 0.81 Water=1	Water Solubility	Negligible < 0.1 %
Viscosity	Data lacking	Explosive Properties	Data lacking
Oxidizing Properties:	Data lacking		
Volatility			
Vapor Pressure	38 mmHg (torr)	Vapor Density	3.6 Air=1
	1		<u> </u>

Evaporation Rate	3.5 n-Butyl Acetate = 1	Volatiles (Vol.)	85 %				
Flammability							
Flash Point	18 C(64.4 F)	UEL	Data lacking				
LEL	Data lacking	Autoignition	Data lacking				
Heat of Combustion (ΔHc)	Data lacking	Flammability (solid, gas)	Data lacking				
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

Strong oxidizing agents.

10.6 Hazardous decomposition products

None known.

Section 11 - Toxicological Information

11.1 Information on toxicological effects

Component Name	CAS	Data
Toluene (20% TO 40%)	LTUX-XX-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 2 mg/24H SEV; skn-rbt 500 mg MOD; Mutagen: sce-hmn-ihl 252 ug/L/19Y; Reproductive: ihl-rat TCLo:2000 ppm (multigeneration)
Silica, amorphous fumed (< 5%)		Acute Toxicity: orl-rat LD50:3160 mg/kg; Multi-dose Toxicity: ihl-rat TCLo:154 mg/m3/6H/4W-l

	· ·
GHS Properties	Classification
Acute toxicity	EU/CLP ◆ Classification criteria not met OSHA HCS 2012 ◆ Acute Toxicity - Oral 4 - ATE mix (oral) = 691.209245 mg/kg
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; Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation
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

Potential Health Effects Inhalation

Inhalation, Skin, Eye, Ingestion

Acute (Immediate)

• May cause respiratory irritation. May affect the central nervous system. Symptoms may include dizziness, drowsiness, lethargy, coma and death.

Chronic (Delayed)

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin

Acute (Immediate)

No data available.

Causes skin irritation.

Chronic (Delayed)

Eye Acute (Immediate)

Chronic (Delayed)

Cilionic (Dela

Ingestion

Acute (Immediate)

Causes serious eye irritation.

No data available.

 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.

No data available.

Chronic (Delayed)

Other

Chronic (Delayed)

Reproductive Effects

• Chronic exposure to hexane may produce peripheral neuropathy (motor sensory) and CNS abnormalities.

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

Key to abbreviations

LC = Lethal Concentration

SEV = Severe

LD = Lethal Dose
MOD = Moderate

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, containing a flammable liquid	3	II	NDA
TDG	UN1133	ADHESIVES containing flammable liquid	3	II	Potential Marine Pollutant
IMO/IMDG	UN1133	ADHESIVES, containing a flammable liquid	3	II	NDA
ADN	UN1133	ADHESIVES containing flammable liquid	3	II	NDA
ADR/RID	UN1133	ADHESIVES, containing a flammable liquid	3	II	NDA
IATA/ICAO	UN1133	Adhesives, containing a flammable liquid	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		
Light aliphatic solvent naphtha	64742-89-8	No	No	No		
Silica, amorphous fumed	112945-52- 5	No	No	No		
Toluene	108-88-3	Yes	Yes	Yes		

Inventory								
Component	CAS	Canada D	SL	Canada NDSL	China	EU EIN	ECS	EU ELNICS
Light aliphatic solvent naphtha	64742-89-8	8 Yes		No	Yes	Yes	S	No
Silica, amorphous fumed	112945-52 5	- Yes		No	Yes	No)	No
Toluene	108-88-3	Yes		No	Yes	Yes	S	No
				Inventory (Cor	n't.)			
Component		CAS	Ja	pan ENCS	Korea KECL		7	rsca
Light aliphatic solvent naphtha	64	742-89-8		No	Yes			Yes
Silica, amorphous fumed 112945-52-5		Yes	Yes	_		No		
Toluene	10	8-88-3		Yes	Yes			Yes

Australia

Labor Australia - Work Health and Safety Regulations - Hazardou	s Substances Requiring Health Monito	ring
Toluene	108-88-3	Not Listed
Light aliphatic solvent naphtha	64742-89-8	Not Listed
Silica, amorphous fumed	112945-52-5	Not Listed
Australia - High Volume Industrial Chemicals List		
Toluene	108-88-3	
Light aliphatic solvent naphtha	64742-89-8	
Silica, amorphous fumed	112945-52-5	Not Listed
Australia - List of Designated Hazardous Substances - Cla	essification	
• Toluene	108-88-3	F, Xn, Xi Repr.Cat.3 R11, R63, R48/20, R65, R38, R67
Light aliphatic solvent naphtha	64742-89-8	Xn Carc.Cat.2, Muta.Cat.2 R45, R46, R65
Silica, amorphous fumed	112945-52-5	Self classification required (respirable dust)

Environment

Australia - National Pollutant Inventory (NPI) Substance List

• Toluene 108-88-3 10 tonne/yr Threshold category 1

Light aliphatic solvent naphtha	64742-89-8	Not Listed
Silica, amorphous fumed	112945-52-5	Not Listed
Australia - Ozone Protection Act - Scheduled Substances		
Toluene	108-88-3	Not Listed
Light aliphatic solvent naphtha	64742-89-8	Not Listed
Silica, amorphous fumed	112945-52-5	Not Listed
Australia - Priority Existing Chemical Program		
Toluene	108-88-3	Candidate chemical
Light aliphatic solvent naphtha	64742-89-8	Not Listed
Silica, amorphous fumed	112945-52-5	Not Listed

Belgium

108-88-3	Not Listed
64742-89-8	Not Listed
112945-52-5	Not Listed
	112945-52-5

Bulgaria

Toluene	108-88-3	0.25 mg/m3 MAHCL
Light aliphatic solvent naphtha	64742-89-8	Not Listed
Silica, amorphous fumed	112945-52-5	Not Listed
Bulgaria - Air Quality - Maximum Admissible Hazardous	Contaminant Levels - 30 Minute	
Toluene	108-88-3	Not Listed
Light aliphatic solvent naphtha	64742-89-8	Not Listed
Silica, amorphous fumed	112945-52-5	Not Listed
Bulgaria - Air Quality - Maximum Admissible Hazardous	Contaminant Levels - Annual	
• Toluene	108-88-3	Not Listed
Light aliphatic solvent naphtha	64742-89-8	Not Listed
Silica, amorphous fumed	112945-52-5	Not Listed

Canada

oor Canada - WHMIS - Classifications of Substances	
Toluene	108-88-3 B2, D2A, D2B
Light aliphatic solvent naphtha	64742-89-8 B2
Silica, amorphous fumed	112945-52-5 Not Listed
Canada - WHMIS - Ingredient Disclosure List	
• Toluene	108-88-3 1 %
Light aliphatic solvent naphtha	64742-89-8 Not Listed
	112945-52-5 Not Listed

Environment Canada - CEPA - Priority Substances List		
		Priority Substance List 1
Toluene	108-88-3	(substance not considered

a Light alighetic calcourt combine		
Light aliphatic solvent naphtha	64742-89-8	Not Listed
Silica, amorphous fumed	112945-52-5	Not Listed

Canada New Brunswick

Toluene	108-88-3 Not	_isted
Light aliphatic solvent naphtha	64742-89-8 Not	Listed
Silica, amorphous fumed	112945-52-5 Not	Listed
Canada - New Brunswick - Ozone Depleting Substances	- Schedule B	
. 5		Listed
Canada - New Brunswick - Ozone Depleting Substances • Toluene • Light aliphatic solvent naphtha	108-88-3 Not	Listed Listed

China

108-88-3	Not Listed
64742-89-8	Not Listed
112945-52-5	Not Listed
	64742-89-8

Denmark

Environment Denmark - List of Undesirable Substances - Product Groups/Function		
• Toluene	108-88-3	Solvents in a wide range of products including paints, coatings and cooling lubricants (listed under Organic solvents)
Light aliphatic solvent naphtha	64742-89-8	Not Listed
Silica, amorphous fumed	112945-52-5	Not Listed

Europe

Other EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification		
• Toluene	108-88-3	F; R11 Xi; R38 Xn; R48/20-65 Repr.Cat.3; R63 R67
Light aliphatic solvent naphtha	64742-89-8	Carc.Cat.2; R45 Muta.Cat.2; R46 Xn; R65
Silica, amorphous fumed	112945-52-5	Not Listed
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Concentration Limits		
Toluene	108-88-3	Not Listed
Light aliphatic solvent naphtha	64742-89-8	Not Listed
Silica, amorphous fumed	112945-52-5	Not Listed
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Labelling		
• Toluene	108-88-3	F Xn R:11-38-48/20-63-65-67 S:(2)-36/37-46-62
Light aliphatic solvent naphtha	64742-89-8	T R:45-46-65 S:53-45
Silica, amorphous fumed	112945-52-5	Not Listed

Toluene	108-88-3	Not Listed
Light aliphatic solvent naphtha	64742-89-8	P
Silica, amorphous fumed	112945-52-5	Not Listed
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases		
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases	100 00 2	S-(2) 26/27 46 62
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases • Toluene • Light aliphatic solvent naphtha	108-88-3 64742-89-8	S:(2)-36/37-46-62 S:53-45

Germany Labor

	ident Prevention	
Toluene	108-88-3	Not Listed
Light aliphatic solvent naphtha	64742-89-8	Not Listed
Silica, amorphous fumed	112945-52-5	Not Listed
Germany - Immission Control - Qualifying Quantities for Safety Rep	oorting	
Toluene	108-88-3	Not Listed
Light aliphatic solvent naphtha	64742-89-8	Not Listed
Silica, amorphous fumed	112945-52-5	Not Listed
Germany - TRGS 505 - Specific Lead Regulations		
Toluene	108-88-3	Not Listed
Light aliphatic solvent naphtha	64742-89-8	Not Listed
Silica, amorphous fumed	112945-52-5	Not Listed
Germany - TRGS 511 - Specific Ammonium Nitrate Regulations		
Toluene	108-88-3	Not Listed
Light aliphatic solvent naphtha	64742-89-8	Not Listed
Silica, amorphous fumed	112945-52-5	Not Listed
Germany - TA Luft - Types and Classes • Toluene	108-88-3	Not Listed
• Toluene	108-88-3 64742-89-8	Not Listed Not Listed
 Toluene Light aliphatic solvent naphtha	64742-89-8	Not Listed
 Toluene Light aliphatic solvent naphtha Silica, amorphous fumed	64742-89-8	Not Listed
 Toluene Light aliphatic solvent naphtha Silica, amorphous fumed Germany - TA Luft - Emission Limits for Carcinogenic Substances	64742-89-8 112945-52-5	Not Listed Not Listed
 Toluene Light aliphatic solvent naphtha Silica, amorphous fumed Germany - TA Luft - Emission Limits for Carcinogenic Substances Toluene 	64742-89-8 112945-52-5 108-88-3	Not Listed Not Listed
 Toluene Light aliphatic solvent naphtha Silica, amorphous fumed Germany - TA Luft - Emission Limits for Carcinogenic Substances Toluene Light aliphatic solvent naphtha 	64742-89-8 112945-52-5 108-88-3 64742-89-8	Not Listed Not Listed Not Listed Not Listed
 Toluene Light aliphatic solvent naphtha Silica, amorphous fumed Germany - TA Luft - Emission Limits for Carcinogenic Substances Toluene Light aliphatic solvent naphtha Silica, amorphous fumed 	64742-89-8 112945-52-5 108-88-3 64742-89-8	Not Listed Not Listed Not Listed Not Listed
 Toluene Light aliphatic solvent naphtha Silica, amorphous fumed Germany - TA Luft - Emission Limits for Carcinogenic Substances Toluene Light aliphatic solvent naphtha Silica, amorphous fumed Germany - TA Luft - Emission Limits for Fibers 	64742-89-8 112945-52-5 108-88-3 64742-89-8 112945-52-5	Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed
 Toluene Light aliphatic solvent naphtha Silica, amorphous fumed Germany - TA Luft - Emission Limits for Carcinogenic Substances Toluene Light aliphatic solvent naphtha Silica, amorphous fumed Germany - TA Luft - Emission Limits for Fibers Toluene 	64742-89-8 112945-52-5 108-88-3 64742-89-8 112945-52-5	Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed
 Toluene Light aliphatic solvent naphtha Silica, amorphous fumed Germany - TA Luft - Emission Limits for Carcinogenic Substances Toluene Light aliphatic solvent naphtha Silica, amorphous fumed Germany - TA Luft - Emission Limits for Fibers Toluene Light aliphatic solvent naphtha 	64742-89-8 112945-52-5 108-88-3 64742-89-8 112945-52-5 108-88-3 64742-89-8	Not Listed
 Toluene Light aliphatic solvent naphtha Silica, amorphous fumed Germany - TA Luft - Emission Limits for Carcinogenic Substances Toluene Light aliphatic solvent naphtha Silica, amorphous fumed Germany - TA Luft - Emission Limits for Fibers Toluene Light aliphatic solvent naphtha Silica, amorphous fumed Silica, amorphous fumed Silica, amorphous fumed	64742-89-8 112945-52-5 108-88-3 64742-89-8 112945-52-5 108-88-3 64742-89-8	Not Listed
 Toluene Light aliphatic solvent naphtha Silica, amorphous fumed Germany - TA Luft - Emission Limits for Carcinogenic Substances Toluene Light aliphatic solvent naphtha Silica, amorphous fumed Germany - TA Luft - Emission Limits for Fibers Toluene Light aliphatic solvent naphtha Silica, amorphous fumed Germany - TA Luft - Emission Limits for Inorganic Dusts	64742-89-8 112945-52-5 108-88-3 64742-89-8 112945-52-5 108-88-3 64742-89-8 112945-52-5	Not Listed Not Listed

Silica, amorphous fumed	112945-52-5	Not Listed
Light aliphatic solvent naphtha	64742-89-8	Not Listed
• Toluene	108-88-3	Not Listed
Germany - Water Classification (VwVwS) - Annex 3		
Silica, amorphous fumed	112945-52-5	Not Listed
Light aliphatic solvent naphtha	64742-89-8	ID Number 27, hazard class 1 - low hazard to waters
• Toluene	108-88-3	ID Number 194, hazard class 2 - hazard to waters
Germany - Water Classification (VwVwS) - Annex 2 - Water Hazard Classes		
Silica, amorphous fumed	112945-52-5	Not Listed
Light aliphatic solvent naphtha	64742-89-8	Not Listed
Toluene	108-88-3	Not Listed
Germany - Water Classification (VwVwS) - Annex 1		
Silica, amorphous fumed	112945-52-5	Not Listed
Light aliphatic solvent naphtha	64742-89-8	Not Listed
Germany - TA Luft - Emission Limits for Organic Substances • Toluene	108-88-3	Not Listed
Silica, amorphous fumed	112945-52-5	Not Listed
Light aliphatic solvent naphtha	64742-89-8	Not Listed
Toluene	108-88-3	Not Listed

United States

Toluene	108-88-3	Not Listed
Light aliphatic solvent naphtha	64742-89-8	Not Listed
Silica, amorphous fumed	112945-52-5	Not Listed
.S OSHA - Specifically Regulated Chemicals Toluene	108-88-3	Not Listed
Toluene	108-88-3	Not Listed
Library Carlos Carlos and consideration of the	64742-89-8	Not Listed
Light aliphatic solvent naphtha		

Environment U.S CAA (Clean Air Act) - 1990 Hazardous Air Pollutants		
Toluene	108-88-3	
Light aliphatic solvent naphtha	64742-89-8	Not Listed
Silica, amorphous fumed	112945-52-5	Not Listed
U.S CERCLA/SARA - Hazardous Substances and their Reportable Quantit	ies	
• Toluene	108-88-3	1000 lb final RQ; 454 kg final RQ
Light aliphatic solvent naphtha	64742-89-8	Not Listed
Silica, amorphous fumed	112945-52-5	Not Listed
U.S CERCLA/SARA - Radionuclides and Their Reportable Quantities		
• Toluene	108-88-3	Not Listed
Light aliphatic solvent naphtha	64742-89-8	Not Listed

Silica, amorphous fumed	112945-52-5	Not Listed
U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs		
Toluene	108-88-3	Not Listed
Light aliphatic solvent naphtha	64742-89-8	Not Listed
Silica, amorphous fumed	112945-52-5	Not Listed
- Silica, amorphous rumeu	112943-32-3	Not Listed
U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs		
Toluene	108-88-3	Not Listed
Light aliphatic solvent naphtha	64742-89-8	Not Listed
Silica, amorphous fumed	112945-52-5	Not Listed
U.S CERCLA/SARA - Section 313 - Emission Reporting		
Toluene	108-88-3	1.0 % de minimis
		concentration
Light aliphatic solvent naphtha	64742-89-8	Not Listed
Silica, amorphous fumed	112945-52-5	Not Listed
U.S CERCLA/SARA - Section 313 - PBT Chemical Listing		
• Toluene	108-88-3	Not Listed
	64742-89-8	Not Listed
Light aliphatic solvent naphtha		
Silica, amorphous fumed	112945-52-5	Not Listed
U.S RCRA (Resource Conservation & Recovery Act) - Basis for Listing - Appendix	(VII	
		Included in waste streams:
Toluene	108-88-3	F005, F024, F025, F039, K015,
		K036, K037, K149, K151
Light aliphatic solvent naphtha	64742-89-8	Not Listed
Silica, amorphous fumed	112945-52-5	Not Listed
U.S RCRA (Resource Conservation & Recovery Act) - Constituents for Detection	Monitoring	
• Toluene	_	
	108-88-3	
Light aliphatic solvent naphtha	64742-89-8	Not Listed
Silica, amorphous fumed	112945-52-5	Not Listed
U.S RCRA (Resource Conservation & Recovery Act) - Hazardous Constituents - A	ppendix VIII to	40 CFR 261
Toluene	108-88-3	waste number U220
Light aliphatic solvent naphtha	64742-89-8	Not Listed
Silica, amorphous fumed	112945-52-5	Not Listed
Silica, amorphous rumeu	112945-52-5	Not Listed
U.S RCRA (Resource Conservation & Recovery Act) - List for Hazardous Constitu	ients	
Toluene	108-88-3	
Light aliphatic solvent naphtha	64742-89-8	Not Listed
Silica, amorphous fumed	112945-52-5	Not Listed
U.S RCRA (Resource Conservation & Recovery Act) - Phase 4 LDR Rule - Univers	al Treatment St	andards
		0.080 mg/L (wastewater); 10
• Toluene	108-88-3	mg/kg (nonwastewater)
Light aliphatic solvent naphtha	64742-89-8	Not Listed
Silica, amorphous fumed	112945-52-5	Not Listed
U.S RCRA (Resource Conservation & Recovery Act) - TSD Facilities Ground Wate	r Monitorina	
	_	
• Toluene	108-88-3	N. alexandr
Light aliphatic solvent naphtha	64742-89-8	Not Listed
Silica, amorphous fumed	112945-52-5	Not Listed

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

• Toluene	108-88-3	waste number U220
Light aliphatic solvent naphtha	64742-89-8	Not Listed
Silica, amorphous fumed	112945-52-5	Not Listed

United States - California

vironment		
J.S California - Proposition 65 - Carcinogens List		
• Toluene	108-88-3	Not Listed
Light aliphatic solvent naphtha	64742-89-8	Not Listed
• Silica, amorphous fumed	112945-52-5	Not Listed
J.S California - Proposition 65 - Developmental Toxicity		
Toluene	108-88-3	developmental toxicity, initia date 1/1/91
Light aliphatic solvent naphtha	64742-89-8	Not Listed
Silica, amorphous fumed	112945-52-5	Not Listed
J.S California - Proposition 65 - Maximum Allowable Dose Levels (MADL)		
• Toluene	108-88-3	7000 µg/day MADL (level represents absorbed dose)
Light aliphatic solvent naphtha	64742-89-8	Not Listed
Silica, amorphous fumed	112945-52-5	Not Listed
J.S California - Proposition 65 - No Significant Risk Levels (NSRL)		
• Toluene	108-88-3	Not Listed
Light aliphatic solvent naphtha	64742-89-8	Not Listed
Silica, amorphous fumed	112945-52-5	Not Listed
J.S California - Proposition 65 - Reproductive Toxicity - Female		
• Toluene	108-88-3	female reproductive toxicity initial date 8/7/09
Light aliphatic solvent naphtha	64742-89-8	Not Listed
Silica, amorphous fumed	112945-52-5	Not Listed
J.S California - Proposition 65 - Reproductive Toxicity - Male		
• Toluene	108-88-3	Not Listed
Light aliphatic solvent naphtha	64742-89-8	Not Listed
Silica, amorphous fumed	112945-52-5	Not Listed

United States - Pennsylvania

Toluene	108-88-3
Light aliphatic solvent naphtha	64742-89-8 Not Listed
Silica, amorphous fumed	112945-52-5 Not Listed
LS Pennsylvania - RTK (Right to Know) - Special Haza	rdous Substances
J.S Pennsylvania - RTK (Right to Know) - Special Haza • Toluene	
J.S Pennsylvania - RTK (Right to Know) - Special Haza Toluene Light aliphatic solvent naphtha	rdous Substances 108-88-3 Not Listed 64742-89-8 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 Preparation Date Disclaimer/Statement of Liability

- 11/March/2014
- 13/December/2010
- 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