

## Safety Data Sheet



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

### 1.1 Product identifier

<b>Product Name</b>	• <b>UltraPly Bonding Adhesive</b>
<b>Synonyms</b>	• TPO Bonding Adhesive 5G; UltraPly TPO Bonding Adhesive
<b>SDS Number/Grade</b>	• FS-025

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

<b>Relevant identified use(s)</b>	• Adhesive
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### 1.3 Details of the supplier of the safety data sheet

<b>Manufacturer</b>	• Firestone Building Products Company 250 West 96th Street Indianapolis, IN 46260 United States
	firestonemsds@bfdp.com
<b>Telephone (General)</b>	• 800-428-4442

### 1.4 Emergency telephone number

<b>Manufacturer</b>	• (800) 424-9300 - CHEMTREC
<b>Manufacturer</b>	• (703) 527-3887 - CHEMTREC - International

## Section 2: Hazards Identification

### EU/EEC

According to EU Directive 1272/2008 (CLP)/REACH 1907/2006 [amended by 453/2010]  
According to EU Directive 67/548/EEC (DSD) or 1999/45/EC (DPD)

### 2.1 Classification of the substance or mixture

<b>CLP</b>	• Flammable Liquids 2 - H225 Skin Irritation 2 - H315 Eye Irritation 2 - H319 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 3 - H412
<b>DSD/DPD</b>	• Highly Flammable (F) Irritant (Xi) Harmful (Xn) Substances Toxic To Reproduction - Category 3 R11, R38, R48/20, R52, R53, R63, R67

### 2.2 Label Elements

CLP

**DANGER**

- Hazard statements**
- H225 - Highly flammable liquid and vapour
  - H315 - Causes skin irritation
  - H319 - Causes serious eye irritation
  - H336 - May cause drowsiness or dizziness
  - H361d - Suspected of damaging the unborn child.
  - H373 - May cause damage to organs (Central Nervous System/CNS) through prolonged or repeated exposure via inhalation
  - H412 - Harmful to aquatic life with long lasting effects

**Precautionary statements**

- Prevention**
- P201 - Obtain special instructions before use.
  - P202 - Do not handle until all safety precautions have been read and understood.
  - P210 - Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking.
  - P233 - Keep container tightly closed.
  - P240 - Ground and/or bond container and receiving equipment.
  - P241 - Use explosion-proof electrical/ventilating/lighting/equipment.
  - P242 - Use only non-sparking tools.
  - P243 - Take precautionary measures against static discharge.
  - P264 - Wash thoroughly after handling.
  - P271 - Use only outdoors or in a well-ventilated area.
  - P273 - Avoid release to the environment.
  - P280 - Wear protective gloves/protective clothing/eye protection/face protection.
  - P281 - Use personal protective equipment as required.
- Response**
- P370+P378 - In case of fire: Use appropriate media for extinction.
  - P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
  - P312 - Call a POISON CENTER or doctor/physician if you feel unwell.
  - P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
  - P352 - Wash with plenty of soap and water.
  - P332+P313 - If skin irritation occurs: Get medical advice/attention.
  - P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - P337+P313 - If eye irritation persists: Get medical advice/attention.
  - P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
  - P308+P313 - IF exposed or concerned: Get medical advice/attention.
  - P314 - Get medical advice/attention if you feel unwell.
  - P321 - Specific treatment, see supplemental first aid information.
- Storage/Disposal**
- P405 - Store locked up.
  - 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.
- 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.
  - R52 - Harmful to aquatic organisms.
  - R53 - May cause long-term adverse effects in the aquatic environment.
  - R63 - Possible risk of harm to the unborn child.

- R65 - Harmful: may cause lung damage if swallowed.  
 R67 - Vapours may cause drowsiness and dizziness.
- Safety phrases**
- S9 - Keep container in a well ventilated place
  - S16 - Keep away from sources of ignition - No Smoking.
  - S37 - Wear suitable gloves.

## 2.3 Other Hazards

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

## United States (US)

According to OSHA 29 CFR 1910.1200 HCS

### 2.1 Classification of the substance or mixture

- OSHA HCS 2012**
- Flammable Liquids 2 - H225
  - Acute Toxicity Oral 4 - H302
  - Skin Irritation 2 - H315
  - Eye Irritation 2A - H319
  - Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects - H336
  - Carcinogenicity 2 - H351
  - Reproductive Toxicity 2 - H361
  - Specific Target Organ Toxicity Repeated Exposure 2 - H373

### 2.2 Label elements

OSHA HCS 2012

#### DANGER



- Hazard statements**
- Highly flammable liquid and vapour - H225
  - Harmful if swallowed - H302
  - Causes skin irritation - H315
  - Causes serious eye irritation - H319
  - May cause drowsiness or dizziness - H336
  - Suspected of causing cancer. - H351
  - Suspected of damaging fertility or the unborn child. - H361
  - May cause damage to organs (Central Nervous System/CNS) 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
  - 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

Wash with plenty of soap and water. - P352

If skin irritation occurs: Get medical advice/attention. - P332+P313

Wash contaminated clothing before reuse. - P363

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

Get medical advice/attention if you feel unwell. - P314

Specific treatment, see supplemental first aid information. - P321

### Storage/Disposal

- Keep cool. - P235

Store in a well-ventilated place. Keep container tightly closed. - P403+P233

Store locked up. - P405

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

### Supplemental information

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

## 2.3 Other hazards

### OSHA HCS 2012

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

## Canada

### According to WHMIS

## 2.1 Classification of the substance or mixture

### WHMIS

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

## 2.2 Label elements

### WHMIS



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

## 2.3 Other hazards

### WHMIS

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

## 2.4 Other information

### NFPA



See Section 12 for Ecological Information.

## Section 3 - Composition/Information on Ingredients

### 3.1 Substances

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

### 3.2 Mixtures

Hazardous Components					
Chemical Name	Identifiers	%(weight)	LD50/LC50	Classifications According to Regulation/Directive	Comments
Toluene	<b>CAS:</b> 108-88-3 <b>EC Number:</b> 203-625-9 <b>UN:</b> UN1294	34% TO 44%	Ingestion/Oral-Rat LD50 • 636 mg/kg Inhalation-Rat LC50 • 49 g/m <sup>3</sup> 4 Hour(s) Skin-Rabbit LD50 • 14100 µL/kg	<b>EU DSD/DPD:</b> Annex I - F; R11 Repr. Cat. 3; R63 Xn; R48/20-65 R67 Xi; R38 <b>EU CLP:</b> Annex VI - Flam. Liq. 2, H226; Repr. 2, H361d; Asp. Tox. 1, H304; STOT RE 2 * H373; Skin Irrit. 2, H315; STOT SE 3, H336 <b>OSHA HCS 2012:</b> Flam. Liq. 2; Eye Irrit. 2A; Skin Irrit. 2; Repr. 2; Acute Tox. 4 (oral); STOT SE 3: Narc.; Asp. Tox. 1	NDA
Naphtha, petroleum, solvent-refined light (primarily Hexane)	<b>CAS:</b> 64741-84-0 <b>EC Number:</b> 265-086-6	25% TO 35%	NDA	<b>EU DSD/DPD:</b> Annex I - Carc. Cat. 2; R45; Muta. Cat. 2; R46; Xn; R65 <b>EU CLP:</b> Annex VI - Carc. 1B, H350; Muta. 1B, H340; Asp. Tox. 1, H304 <b>OSHA HCS 2012:</b> Not Classified - Classification criteria not met	NDA
Polymers	NDA	5% TO 15%	NDA	<b>EU DSD/DPD:</b> Not Classified - Classification criteria not met <b>EU CLP:</b> Not Classified - Classification criteria not met <b>OSHA HCS 2012:</b> Not Classified - Classification criteria not met	NDA
Acetone	<b>CAS:</b> 67-64-1 <b>EC Number:</b> 200-662-2 <b>UN:</b> UN1090	5% TO 10%	Ingestion/Oral-Rat LD50 • 5800 mg/kg Inhalation-Rat LC50 • 50100 mg/m <sup>3</sup>	<b>EU DSD/DPD:</b> Annex I - F; R11 Xi; R36; R66; R67 <b>EU CLP:</b> Annex VI - Flam. Liq. 2, H226; Eye Irrit. 2, H319; STOT SE 3, H336 <b>OSHA HCS 2012:</b> Flam. Liq. 2; Eye Irrit. 2A; STOT SE 3: Resp. Irrit. & Narc.; Repr. 2	NDA
Polychlorophene	<b>CAS:</b> 9010-98-4	< 12%	Ingestion/Oral-Rat LD50 • >40 g/kg	<b>EU DSD/DPD:</b> Not Classified - Classification criteria not met <b>EU CLP:</b> Not Classified - Classification criteria not met <b>OSHA HCS 2012:</b> Not Classified - Classification criteria not met	NDA
Styrene	<b>CAS:</b> 100-42-5 <b>EC Number:</b> 202-851-5 <b>UN:</b> UN2055	< 1%	Ingestion/Oral-Rat LD50 • 2650 mg/kg Inhalation-Rat LC50 • 11800 mg/m <sup>3</sup> 4 Hour (s)	<b>EU DSD/DPD:</b> Annex I - R10 Xn; R20 Xi; R36/38 <b>EU CLP:</b> Annex VI - Flam. Liq. 3, H226 <b>OSHA HCS 2012:</b> Flam. Liq. 3; Eye Irrit. 2; Acute Tox. 4; Carc. 2	NDA
Magnesium oxide	<b>CAS:</b> 1309-48-4 <b>EC Number:</b> 215-171-9	< 1%	NDA	<b>EU DSD/DPD:</b> Self Classified - Xi; R36/37 <b>EU CLP:</b> Self Classified - Eye Irrit. 2, H319; STOT SE 3, H335 <b>OSHA HCS 2012:</b> Eye Irrit. 2; STO SE 3: Resp. Irrit.	NDA

Xylene	CAS:1330-20-7 EC Number:215-535-7 UN:UN1307	< 1%	Ingestion/Oral-Rat LD50 • 4300 mg/kg Inhalation-Rat LC50 • 5000 ppm 4 Hour(s) Skin-Rabbit LD50 • >1700 mg/kg	EU DSD/DPD: Annex I - R10 Xn; R20/21 Xi; R38 EU CLP: Annex VI - Flam. Liq. 3, H226; Acute Tox. 4 * H312; Acute Tox. 4 * H332; Skin Irrit. 2 , H315 OSHA HCS 2012: Flam. Liq. 3; Acute Tox. 4 (skin); Eye Irrit. 2A; Skin Irrit; 2, Repr. 2 (inhalation)	NDA
Zinc oxide	CAS:1314-13-2 EC Number:215-222-5	< 0.3%	NDA	EU DSD/DPD: Self Classified - N; R50-53 EU CLP: Self Classified - Aquatic Acute 1, H400; Aquatic Chronic 1, H410 OSHA HCS 2012: Not Classified - Classification criteria not met	NDA

See Section 11 for Toxicological Information.

## Section 4 - First Aid Measures

### 4.1 Description of first aid measures

#### Inhalation

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

#### Skin

- In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Remove and isolate contaminated clothing and shoes. If skin irritation occurs: Get medical advice/attention.

#### Eye

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

#### Ingestion

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

### 4.2 Most important symptoms and effects, both acute and delayed

- Refer to Section 11 - Toxicological Information.

### 4.3 Indication of any immediate medical attention and special treatment needed

#### Notes to Physician

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

## Section 5 - Firefighting Measures

### 5.1 Extinguishing media

#### Suitable Extinguishing Media

- CAUTION: For mixtures containing a high percentage of an alcohol or polar solvent, alcohol-resistant foam may be more effective.  
LARGE FIRES: Water spray, fog or alcohol-resistant foam.  
SMALL FIRES: Dry chemical, CO<sub>2</sub>, water spray or alcohol-resistant foam.

#### Unsuitable Extinguishing Media

- Do not use a direct stream of water.

### 5.2 Special hazards arising from the substance or mixture

#### Unusual Fire and Explosion Hazards

- Containers may explode when heated.  
Vapor explosion hazard indoors, outdoors or in sewers.  
HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames.  
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.  
 Those substances designated with a "P" may polymerize explosively when heated or involved in a fire.  
 Vapors may form explosive mixtures with air.  
 Vapors may travel to source of ignition and flash back.

## Hazardous Combustion Products

### 5.3 Advice for firefighters

- Oxides of carbon, oxides of nitrogen, hydrochloric acid.
- 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: Cool containers with flooding quantities of water until well after fire is out.

## Section 6 - Accidental Release Measures

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

#### Personal Precautions

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

#### Emergency Procedures

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

### 6.2 Environmental precautions

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

### 6.3 Methods and material for containment and cleaning up

#### Containment/Clean-up Measures

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

### 6.4 Reference to other sections

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

## Section 7 - Handling and Storage

### 7.1 Precautions for safe handling

#### Handling

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

### 7.2 Conditions for safe storage, including any incompatibilities

#### Storage

- Store locked up. Keep away from fire. Store in a well-ventilated place. Keep container tightly closed.

### 7.3 Specific end use(s)

- Refer to Section 1.2 - Relevant identified uses.



## Section 8 - Exposure Controls/Personal Protection

### 8.1 Control parameters

Exposure Limits/Guidelines						
	Result	ACGIH	Canada Ontario	Canada Quebec	China	Europe
Zinc oxide (1314-13-2)	STELs	10 mg/m <sup>3</sup> STEL (respirable fraction)	10 mg/m <sup>3</sup> STEL (respirable)	10 mg/m <sup>3</sup> STEV (fume)	5 mg/m <sup>3</sup> STEL	Not established
	TWAs	2 mg/m <sup>3</sup> TWA (respirable fraction)	2 mg/m <sup>3</sup> TWA (respirable)	10 mg/m <sup>3</sup> TWAEV (containing no Asbestos and <1% Crystalline silica, total dust); 5 mg/m <sup>3</sup> TWAEV (fume)	3 mg/m <sup>3</sup> TWA	Not established
Magnesium oxide (1309-48-4)	STELs	Not established	Not established	Not established	20 mg/m <sup>3</sup> STEL (fume)	Not established
	TWAs	10 mg/m <sup>3</sup> TWA (inhalable fraction)	10 mg/m <sup>3</sup> TWA (inhalable)	10 mg/m <sup>3</sup> TWAEV (fume, as Mg)	10 mg/m <sup>3</sup> TWA (fume)	Not established
Styrene (100-42-5)	STELs	40 ppm STEL	100 ppm STEL	100 ppm STEV; 426 mg/m <sup>3</sup> STEV	100 mg/m <sup>3</sup> STEL	Not established
	TWAs	20 ppm TWA	35 ppm TWA	50 ppm TWAEV; 213 mg/m <sup>3</sup> TWAEV	50 mg/m <sup>3</sup> TWA	Not established
Xylene (1330-20-7)	STELs	150 ppm STEL	150 ppm STEL	150 ppm STEV; 651 mg/m <sup>3</sup> STEV	100 mg/m <sup>3</sup> STEL	Not established
	TWAs	100 ppm TWA	100 ppm TWA	100 ppm TWAEV; 434 mg/m <sup>3</sup> TWAEV	50 mg/m <sup>3</sup> TWA	Not established
Acetone (67-64-1)	STELs	750 ppm STEL	750 ppm STEL	1000 ppm STEV; 2380 mg/m <sup>3</sup> STEV	450 mg/m <sup>3</sup> STEL	Not established
	TWAs	500 ppm TWA	500 ppm TWA	500 ppm TWAEV; 1190 mg/m <sup>3</sup> TWAEV	300 mg/m <sup>3</sup> TWA	Not established
Toluene (108-88-3)	STELs	Not established	Not established	Not established	100 mg/m <sup>3</sup> STEL	100 ppm STEL; 384 mg/m <sup>3</sup> STEL
	TWAs	20 ppm TWA	20 ppm TWA	50 ppm TWAEV; 188 mg/m <sup>3</sup> TWAEV	50 mg/m <sup>3</sup> TWA	50 ppm TWA; 192 mg/m <sup>3</sup> TWA

#### Exposure Limits/Guidelines (Con't.)

	Result	Germany DFG	Germany TRGS	NIOSH	OSHA
Zinc oxide (1314-13-2)	TWAs	Not established	Not established	5 mg/m <sup>3</sup> TWA (dust and fume)	5 mg/m <sup>3</sup> TWA (fume); 15 mg/m <sup>3</sup> TWA (total dust); 5 mg/m <sup>3</sup> TWA (respirable fraction)
	Ceilings	1 mg/m <sup>3</sup> Peak (respirable fraction, fume)	Not established	15 mg/m <sup>3</sup> Ceiling (dust)	Not established
	STELs	Not established	Not established	10 mg/m <sup>3</sup> STEL (fume)	Not established
	MAKs	1 mg/m <sup>3</sup> TWA MAK (fume, respirable fraction)	Not established	Not established	Not established
	TWAs	Not established	Not established	Not established	15 mg/m <sup>3</sup> TWA (fume, total particulate)



Magnesium oxide (1309-48-4)	MAKs	1.5 mg/m <sup>3</sup> TWA MAK (respirable fraction); 4 mg/m <sup>3</sup> TWA MAK (inhalable fraction)	Not established	Not established	Not established
Styrene (100-42-5)	Ceilings	40 ppm Peak; 172 mg/m <sup>3</sup> Peak	Not established	Not established	200 ppm Ceiling
	TWAs	Not established	20 ppm TWA AGW (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed, exposure factor 2); 86 mg/m <sup>3</sup> TWA AGW (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed, exposure factor 2)	50 ppm TWA; 215 mg/m <sup>3</sup> TWA	100 ppm TWA
	STELs	Not established	Not established	100 ppm STEL; 425 mg/m <sup>3</sup> STEL	Not established
	MAKs	20 ppm TWA MAK; 86 mg/m <sup>3</sup> TWA MAK	Not established	Not established	Not established
Xylene (1330-20-7)	TWAs	Not established	100 ppm TWA AGW (all isomers, exposure factor 2); 440 mg/m <sup>3</sup> TWA AGW (all isomers, exposure factor 2)	Not established	100 ppm TWA; 435 mg/m <sup>3</sup> TWA
	Ceilings	200 ppm Peak (all isomers); 880 mg/m <sup>3</sup> Peak (all isomers)	Not established	Not established	Not established
	MAKs	100 ppm TWA MAK; 440 mg/m <sup>3</sup> TWA MAK	Not established	Not established	Not established
Acetone (67-64-1)	TWAs	Not established	500 ppm TWA AGW (exposure factor 2); 1200 mg/m <sup>3</sup> TWA AGW (exposure factor 2)	250 ppm TWA; 590 mg/m <sup>3</sup> TWA	1000 ppm TWA; 2400 mg/m <sup>3</sup> TWA
	Ceilings	1000 ppm Peak; 2400 mg/m <sup>3</sup> Peak	Not established	Not established	Not established
	MAKs	500 ppm TWA MAK; 1200 mg/m <sup>3</sup> TWA MAK	Not established	Not established	Not established
Toluene (108-88-3)	Ceilings	200 ppm Peak; 760 mg/m <sup>3</sup> Peak	Not established	Not established	300 ppm Ceiling
	TWAs	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/m <sup>3</sup> TWA AGW (The risk of damage to the embryo or fetus	100 ppm TWA; 375 mg/m <sup>3</sup> TWA	200 ppm TWA

			can be excluded when AGW and BGW values are observed, exposure factor 4)		
STELs	Not established	Not established	Not established	150 ppm STEL; 560 mg/m <sup>3</sup> STEL	Not established
MAKs	50 ppm TWA MAK; 190 mg/m <sup>3</sup> TWA MAK	Not established	Not established	Not established	Not established

## Exposure Control Notations

### China

- Styrene (100-42-5): **Skin:** (Skin notation)
- Toluene (108-88-3): **Skin:** (Skin notation)

### Canada Quebec

- Styrene (100-42-5): **Carcinogens:** (C3 carcinogen - effect detected in animals) | **Skin:** (Skin designation)
- Toluene (108-88-3): **Skin:** (Skin designation)

### ACGIH

- Acetone (67-64-1): **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen)
- Magnesium oxide (1309-48-4): **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen)
- Styrene (100-42-5): **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen)
- Toluene (108-88-3): **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen)
- Xylene (1330-20-7): **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen)

### Germany TRGS

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

### Germany DFG

- Acetone (67-64-1): **Pregnancy:** (classification not yet possible)
- Magnesium oxide (1309-48-4): **Pregnancy:** (no risk to embryo/fetus if exposure limits adhered to (respirable fraction); inhalable fraction)
- Styrene (100-42-5): **Carcinogens:** (Category 5 (low carcinogenic potency)) | **Pregnancy:** (no risk to embryo/fetus if exposure limits adhered to)
- Toluene (108-88-3): **Pregnancy:** (no risk to embryo/fetus if exposure limits adhered to) | **Skin:** (skin notation)
- Xylene (1330-20-7): **Pregnancy:** (classification not yet possible (all isomers)) | **Skin:** (skin notation (all isomers))

## Exposure Limits Supplemental

### ACGIH

- Acetone (67-64-1): **BEIs:** (50 mg/L Medium: urine Time: end of shift Parameter: Acetone (nonspecific)) | **TLV Basis - Critical Effects:** (CNS impairment; eye and upper respiratory tract irritation; hematologic effects) | **Notice of Intended Changes (TLVs):** (200 ppm TWA; 500 ppm STEL; BEI; TLV basis: CNS impairment, upper respiratory tract irritation)
- Styrene (100-42-5): **BEIs:** (400 mg/g creatinine Medium: urine Time: end of shift Parameter: Mandelic acid plus phenylglyoxylic acid (nonspecific); 0.2 mg/L Medium: venous blood Time: end of shift Parameter: Styrene (semi-quantitative)) | **TLV Basis - Critical Effects:** (CNS impairment; peripheral neuropathy; upper respiratory tract irritation)
- Toluene (108-88-3): **BEIs:** (0.02 mg/L Medium: blood Time: prior to last shift of workweek Parameter: Toluene; 0.03 mg/L Medium: urine Time: end of shift Parameter: Toluene; 0.3 mg/g creatinine Medium: urine Time: end of shift Parameter: o-Cresol with hydrolysis (background)) | **TLV Basis - Critical Effects:** (female reproductive; pregnancy loss; visual impairment)
- Xylene (1330-20-7): **BEIs:** (1.5 g/g creatinine Medium: urine Time: end of shift Parameter: Methylhippuric acids) | **TLV Basis - Critical Effects:** (CNS impairment; eye and upper respiratory tract irritation)
- Zinc oxide (1314-13-2): **TLV Basis - Critical Effects:** (metal fume fever)

## 8.2 Exposure controls

### Engineering Measures/Controls

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

### Personal Protective Equipment

#### Respiratory

- Always wear a self-contained breathing apparatus or full-face airline respirator when using this chemical.

<b>Eye/Face</b>	<ul style="list-style-type: none"> <li>Wear splash resistant safety goggles with a faceshield. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.</li> </ul>
<b>Hands</b>	<ul style="list-style-type: none"> <li>Wear appropriate chemical resistant gloves (neoprene, nitrile, polyvinyl alcohol (PVA)).</li> </ul>
<b>Skin/Body</b>	<ul style="list-style-type: none"> <li>Wear appropriate chemical resistant clothing.</li> </ul>
<b>Environmental Exposure Controls</b>	<ul style="list-style-type: none"> <li>Avoid release to the environment.</li> </ul>

## Section 9 - Physical and Chemical Properties

### 9.1 Information on Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Appearance/Description	Yellow amber liquid with strong aromatic odor.
Color	Yellow amber.	Odor	Aromatic
Odor Threshold	Data lacking		
General Properties			
Boiling Point	55 to 142 C(131 to 287.6 F)	Melting Point	Data lacking
Decomposition Temperature	Data lacking	Heat of Decomposition	Data lacking
pH	Data lacking	Specific Gravity/Relative Density	0.844 Water=1
Water Solubility	Insoluble	Viscosity	Not relevant
Explosive Properties	Explosion hazard.	Oxidizing Properties:	Static hazard.
Volatility			
Vapor Pressure	9.5 to 185 mmHg (torr) @ 20 C(68 F)	Vapor Density	> 3 Air=1
Evaporation Rate	1.9 to 9.5 n-Butyl Acetate = 1	VOC (Vol.)	633 g/L
Volatiles (Vol.)	76.4 %		
Flammability			
Flash Point	-18 C(-0.4 F)	UEL	7.5 %
LEL	1.1 %	Autoignition	Data lacking
Flammability (solid, gas)	Not relevant.		
Environmental			
Octanol/Water Partition coefficient	Data lacking		

### 9.2 Other Information

- No additional physical and chemical parameters noted.

## Section 10: Stability and Reactivity

### 10.1 Reactivity

- No dangerous reaction known under conditions of normal use.

### 10.2 Chemical stability

- Stable under normal temperatures and pressures.

### 10.3 Possibility of hazardous reactions

- Hazardous polymerization will not occur.

### 10.4 Conditions to avoid

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

## 10.5 Incompatible materials

- Acids, bases, combustible materials, oxidizing materials.

## 10.6 Hazardous decomposition products

- Thermal decomposition could produce CO, CO<sub>2</sub>, and Oxides of Nitrogen.

## Section 11 - Toxicological Information

### 11.1 Information on toxicological effects

Component Name	CAS	Data
Toluene (34% TO 44%)	108-88-3	<b>Acute Toxicity:</b> orl-rat LD50:636 mg/kg; ihl-rat LC50:49 gm/m <sup>3</sup> /4H; skn-rbt LD50:14100 uL/kg; <b>Irritation:</b> eye-rbt 2 mg/24H SEV; skn-rbt 20 mg/24H MOD; <b>Reproductive:</b> ihl-rat TCLo:800 mg/m <sup>3</sup> /6H (14-20D preg)
Acetone (5% TO 10%)	67-64-1	<b>Acute Toxicity:</b> orl-rat LD50:5800 mg/kg; ihl-rat LC50:50100 mg/m <sup>3</sup> ; <b>Irritation:</b> eye-rbt 20 mg SEV; skn-rbt 500 mg/24H MLD; <b>Reproductive:</b> ihl-rat TCLo:30 mg/m <sup>3</sup> (1-13D preg)
Polychlorophene (< 12%)	9010-98-4	<b>Acute Toxicity:</b> orl-rat LD50:>40 gm/kg
Styrene (< 1%)	100-42-5	<b>Acute Toxicity:</b> orl-rat LD50:2650 mg/kg; ihl-rat LC50:2770 ppm/4H; <b>Irritation:</b> eye-rbt 100 mg SEV; skn-rbt 100% MOD; <b>Reproductive:</b> ihl-rat TCLo:50 ppm/6H (7-12D preg); <b>Tumorigen/Carcinogen:</b> ihl-rat TCLo:100 ppm/4H/5D/1Y-I
Xylene (< 1%)	1330-20-7	<b>Acute Toxicity:</b> orl-rat LD50:4300 mg/kg; ihl-rat LC50:5000 ppm/4H; skn-rbt LD50:>1700 mg/kg; <b>Irritation:</b> eye-rbt 5 mg/24H SEV; skn-rbt 500 mg/24H MOD; <b>Reproductive:</b> ihl-rat TCLo:50 mg/m <sup>3</sup> /6H (1-21D preg)
Zinc oxide (< 0.3%)	1314-13-2	<b>Irritation:</b> eye-rbt 500 mg/24H MLD; skn-rbt 500 mg/24H MLD; <b>Reproductive:</b> orl-rat TDLo:6846 mg/kg (1-22D preg)

GHS Properties	Classification
<b>Acute toxicity</b>	EU/CLP • Classification criteria not met OSHA HCS 2012 • Acute Toxicity 4 (Ingestion/Oral) - ATEmix(oral)= 939.55 mg/kg
<b>Aspiration Hazard</b>	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
<b>Carcinogenicity</b>	EU/CLP • Classification criteria not met OSHA HCS 2012 • Carcinogenicity 2
<b>Germ Cell Mutagenicity</b>	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
<b>Skin corrosion/Irritation</b>	EU/CLP • Skin Irritation 2 OSHA HCS 2012 • Skin Irritation 2
<b>Skin sensitization</b>	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
<b>STOT-RE</b>	EU/CLP • Specific Target Organ Toxicity Repeated Exposure 2 OSHA HCS 2012 • Specific Target Organ Toxicity Repeated Exposure 2
<b>STOT-SE</b>	EU/CLP • Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects OSHA HCS 2012 • Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects
<b>Toxicity for Reproduction</b>	EU/CLP • Toxic to Reproduction 2 OSHA HCS 2012 • Toxic to Reproduction 2

<b>Respiratory sensitization</b>	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
<b>Serious eye damage/Irritation</b>	EU/CLP • Eye Irritation 2 OSHA HCS 2012 • Eye Irritation 2A

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

## Potential Health Effects

### Inhalation

**Acute (Immediate)**

- May be harmful. May affect the central nervous system. Symptoms may include dizziness, drowsiness, lethargy, coma and death.

**Chronic (Delayed)**

- Repeated and prolonged exposure may cause Central Nervous System (CNS) effects.

### Skin

**Acute (Immediate)**

- Causes skin irritation.

**Chronic (Delayed)**

- No data available.

### Eye

**Acute (Immediate)**

- Causes serious eye irritation.

**Chronic (Delayed)**

- No data available.

### Ingestion

**Acute (Immediate)**

- May be harmful.

**Chronic (Delayed)**

- No data available.

Carcinogenic Effects			
	CAS	IARC	NTP
Toluene	108-88-3	Group 3-Not Classifiable	Evidence of Carcinogenicity

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

## Section 12 - Ecological Information

### 12.1 Toxicity

UltraPly Bonding Adhesive					
Dosage	Species	Duration	Results	Exposure Conditions	Comments
5.89 to 7.81 mg/L	<b>Fish:</b> Oncorhynchus Mykiss	96 Hour (s)	LC50	NDA	toluene (108-88-3)
15.22 to 19.05 mg/L	<b>Fish:</b> Pimephales promelas	96 Hour (s)	LC50	NDA	Toluene (108-88-3)
2.1 to 2.98 mg/L	<b>Fish:</b> Pimephales promelas	96 Hour (s)	LC50	NDA	Naphtha, petroleum, solvent-refined light (Primarily hexane) (64741-84-0)
= 9.74 mg/L	<b>Water Flea:</b> Daphnia magna	48 Hour (s)	EC50	NDA	Naphtha, petroleum, solvent-refined light (Primarily Hexane) (64741-84-0)
4.74 to 6.33 mg/L	<b>Fish:</b> Oncorhynchus mykiss	96 Hour (s)	LC50	NDA	Acetone (67-64-1)
10294 to 17704 mg/L	<b>Water Flea:</b> Daphnia magna	48 Hour (s)	EC50	NDA	Acetone (67-64-1)

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

### 12.2 Persistence and degradability

- No information available for the product.

### 12.3 Bioaccumulative potential

- No information available for the product.

### 12.4 Mobility in Soil

- No information available for the product.

### 12.5 Results of PBT and vPvB assessment

- PBT and vPvB assessment has not been carried out.

### 12.6 Other adverse effects

- No studies have been found.

## Section 13 - Disposal Considerations

### 13.1 Waste treatment methods

#### Product waste

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

#### Packaging waste

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

## Section 14 - Transport Information

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

#### 14.6 Special precautions for user

- None known.

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

- Not relevant.

#### 14.8 Other information

- DOT** • Toluene has a reportable quantity of 1000 lbs (454 kg) as listed in Appendix A to 49 CFR 172.101. Xylene has a reportable quantity of 1000 lbs (454 kg) as listed in Appendix A to 49 CFR 172.101. Acetone has a reportable quantity of 5000 lbs (2270 kg) as listed in Appendix A to 49 CFR 172.101. Styrene has a reportable quantity of 1000 lbs (454 kg) as listed in Appendix A to 49 CFR 172.101.

## Section 15 - Regulatory Information

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

### SARA Hazard Classifications • Acute, Chronic, Fire

State Right To Know				
Component	CAS	MA	NJ	PA
Toluene	108-88-3	Yes	Yes	Yes
Naphtha, petroleum, solvent-refined light (primarily Hexane)	64741-84-0	No	No	No
Polymers	NDA	No	No	No
Acetone	67-64-1	Yes	Yes	Yes
Polychlorophene	9010-98-4	No	No	No
Styrene	100-42-5	Yes	Yes	Yes
Magnesium oxide	1309-48-4	Yes	Yes	Yes
Xylene	1330-20-7	Yes	Yes	Yes
Zinc oxide	1314-13-2	Yes	Yes Yes	Yes Yes

Inventory						
Component	CAS	Canada DSL	Canada NDSL	China	EU EINECS	EU ELNICS
Toluene	108-88-3	Yes	No	Yes	Yes	No
Naphtha, petroleum, solvent-refined light (primarily Hexane)	64741-84-0	Yes	No	Yes	Yes	No
Polymers	NDA	No	No	No	No	No
Acetone	67-64-1	Yes	No	Yes	Yes	No
Polychlorophene	9010-98-4	Yes	No	Yes	No	No
Styrene	100-42-5	Yes	No	Yes	Yes	No
Magnesium oxide	1309-48-4	Yes	No	Yes	Yes	No
Xylene	1330-20-7	Yes	No	Yes	Yes	No
Zinc oxide	1314-13-2	Yes	No	Yes	Yes	No

Inventory (Con't.)				
Component	CAS	Japan ENCS	Korea KECL	TSCA
Toluene	108-88-3	Yes	Yes	Yes
Naphtha, petroleum, solvent-refined light (primarily Hexane)	64741-84-0	No	Yes	Yes
Polymers	NDA	No	No	No
Acetone	67-64-1	Yes	Yes	Yes
Polychlorophene	9010-98-4	Yes	Yes	Yes
Styrene	100-42-5	Yes	Yes	Yes
Magnesium oxide	1309-48-4	Yes	Yes	Yes
Xylene	1330-20-7	Yes	Yes	Yes
Zinc oxide	1314-13-2	Yes	Yes	Yes



## Australia

### Labor

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

• Naphtha, petroleum, solvent-refined light (primarily Hexane)	64741-84-0	25% TO 35%	Not Listed
• Acetone	67-64-1	5% TO 10%	Not Listed
• Magnesium oxide	1309-48-4	< 1%	Not Listed
• Styrene	100-42-5	< 1%	Not Listed
• Toluene	108-88-3	34% TO 44%	Not Listed
• Xylene	1330-20-7	< 1%	Not Listed
• Zinc oxide	1314-13-2	< 0.3%	Not Listed
• Polychlorophene	9010-98-4	< 12%	Not Listed

#### Australia - High Volume Industrial Chemicals List

• Naphtha, petroleum, solvent-refined light (primarily Hexane)	64741-84-0	25% TO 35%	Not Listed
• Acetone	67-64-1	5% TO 10%	
• Magnesium oxide	1309-48-4	< 1%	
• Styrene	100-42-5	< 1%	
• Toluene	108-88-3	34% TO 44%	
• Xylene	1330-20-7	< 1%	
• Zinc oxide	1314-13-2	< 0.3%	Not Listed
• Polychlorophene	9010-98-4	< 12%	Not Listed

#### Australia - List of Designated Hazardous Substances - Classification

• Naphtha, petroleum, solvent-refined light (primarily Hexane)	64741-84-0	25% TO 35%	Xn Carc.Cat.2, Muta.Cat.2 R45, R46, R65
• Acetone	67-64-1	5% TO 10%	F, Xi R11, R36, R66, R67
• Magnesium oxide	1309-48-4	< 1%	Self classification required (fume)
• Styrene	100-42-5	< 1%	Xn, Xi R10, R20, R36/38
• Toluene	108-88-3	34% TO 44%	F, Xn, Xi Repr.Cat.3 R11, R63, R48/20, R65, R38, R67
• Xylene	1330-20-7	< 1%	Xn, Xi R10, R20/21, R38
• Zinc oxide	1314-13-2	< 0.3%	Self classification required (dust and fume); N R50, R53
• Polychlorophene	9010-98-4	< 12%	Not Listed

### Environment

#### Australia - National Pollutant Inventory (NPI) Substance List

• Naphtha, petroleum, solvent-refined light (primarily Hexane)	64741-84-0	25% TO 35%	Not Listed
• Acetone	67-64-1	5% TO 10%	10 tonne/yr Threshold category 1 10 tonne/yr Threshold category 1 (fume); 2000 tonne/yr Threshold category 2b (fume); 60000 MWH Threshold category 2b (fume); 20 MW Threshold category 2b (fume)
• Magnesium oxide	1309-48-4	< 1%	
• Styrene	100-42-5	< 1%	10 tonne/yr Threshold category 1

• Toluene	108-88-3	34% TO 44%	10 tonne/yr Threshold category 1
• Xylene	1330-20-7	< 1%	10 tonne/yr Threshold category 1 (including individual or mixed isomers)
• Zinc oxide	1314-13-2	< 0.3%	Not Listed
• Polychlorophene	9010-98-4	< 12%	Not Listed

#### Australia - Ozone Protection Act - Scheduled Substances

• Naphtha, petroleum, solvent-refined light (primarily Hexane)	64741-84-0	25% TO 35%	Not Listed
• Acetone	67-64-1	5% TO 10%	Not Listed
• Magnesium oxide	1309-48-4	< 1%	Not Listed
• Styrene	100-42-5	< 1%	Not Listed
• Toluene	108-88-3	34% TO 44%	Not Listed
• Xylene	1330-20-7	< 1%	Not Listed
• Zinc oxide	1314-13-2	< 0.3%	Not Listed
• Polychlorophene	9010-98-4	< 12%	Not Listed

#### Australia - Priority Existing Chemical Program

• Naphtha, petroleum, solvent-refined light (primarily Hexane)	64741-84-0	25% TO 35%	Not Listed
• Acetone	67-64-1	5% TO 10%	Not Listed
• Magnesium oxide	1309-48-4	< 1%	Not Listed
• Styrene	100-42-5	< 1%	Candidate chemical
• Toluene	108-88-3	34% TO 44%	Candidate chemical
• Xylene	1330-20-7	< 1%	Candidate chemical
• Zinc oxide	1314-13-2	< 0.3%	Not Listed
• Polychlorophene	9010-98-4	< 12%	Not Listed

## Bulgaria

### Environment

#### Bulgaria - Air Quality - Maximum Admissible Hazardous Contaminant Levels - 24 Hour

• Naphtha, petroleum, solvent-refined light (primarily Hexane)	64741-84-0	25% TO 35%	Not Listed
• Acetone	67-64-1	5% TO 10%	0.35 mg/m3 MAHCL
• Magnesium oxide	1309-48-4	< 1%	0.05 mg/m3 MAHCL
• Styrene	100-42-5	< 1%	0.003 mg/m3 MAHCL
• Toluene	108-88-3	34% TO 44%	0.25 mg/m3 MAHCL
• Xylene	1330-20-7	< 1%	0.1 mg/m3 MAHCL
• Zinc oxide	1314-13-2	< 0.3%	Not Listed
• Polychlorophene	9010-98-4	< 12%	Not Listed

## Canada

### Labor

#### Canada - WHMIS - Classifications of Substances

• Naphtha, petroleum, solvent-refined light (primarily Hexane)	64741-84-0	25% TO 35%	Not Listed
• Acetone	67-64-1	5% TO 10%	B2, D2B
• Magnesium oxide	1309-48-4	< 1%	Uncontrolled product according to WHMIS classification criteria
• Styrene	100-42-5	< 1%	B2, D2A
• Toluene	108-88-3	34% TO 44%	B2, D2A, D2B
• Xylene	1330-20-7	< 1%	B2, D2A, D2B
• Zinc oxide	1314-13-2	< 0.3%	Uncontrolled product according to WHMIS classification criteria
• Polychlorophene	9010-98-4	< 12%	Not Listed

#### Canada - WHMIS - Ingredient Disclosure List

• Naphtha, petroleum, solvent-refined light (primarily Hexane)	64741-84-0	25% TO 35%	Not Listed
• Acetone	67-64-1	5% TO 10%	1 %
• Magnesium oxide	1309-48-4	< 1%	1 %
• Styrene	100-42-5	< 1%	0.1 %
• Toluene	108-88-3	34% TO 44%	1 %
• Xylene	1330-20-7	< 1%	Not Listed
• Zinc oxide	1314-13-2	< 0.3%	1 %
• Polychlorophene	9010-98-4	< 12%	Not Listed

#### Environment

##### Canada - CEPA - Priority Substances List

• Naphtha, petroleum, solvent-refined light (primarily Hexane)	64741-84-0	25% TO 35%	Not Listed
• Acetone	67-64-1	5% TO 10%	Not Listed
• Magnesium oxide	1309-48-4	< 1%	Not Listed
• Styrene	100-42-5	< 1%	Priority Substance List 1 (substance not considered toxic)
• Toluene	108-88-3	34% TO 44%	Priority Substance List 1 (substance not considered toxic)
• Xylene	1330-20-7	< 1%	Priority Substance List 1 (substance not considered toxic)
• Zinc oxide	1314-13-2	< 0.3%	Not Listed
• Polychlorophene	9010-98-4	< 12%	Not Listed

## Europe

#### Other

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

• Naphtha, petroleum, solvent-refined light (primarily Hexane)	64741-84-0	25% TO 35%	Carc.Cat.2; R45 Muta.Cat.2; R46 Xn; R65
• Acetone	67-64-1	5% TO 10%	F; R11 Xi; R36 R66 R67
• Magnesium oxide	1309-48-4	< 1%	Not Listed
• Styrene	100-42-5	< 1%	R10 Xn; R20 Xi; R36/38

• Toluene	108-88-3	34% TO 44%	F; R11 Xi; R38 Xn; R48/20-65 Repr.Cat.3; R63 R67
• Xylene	1330-20-7	< 1%	R10 Xn; R20/21 Xi; R38
• Zinc oxide	1314-13-2	< 0.3%	N; R50-53
• Polychlorophene	9010-98-4	< 12%	Not Listed

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

• Naphtha, petroleum, solvent-refined light (primarily Hexane)	64741-84-0	25% TO 35%	Not Listed
• Acetone	67-64-1	5% TO 10%	Not Listed
• Magnesium oxide	1309-48-4	< 1%	Not Listed
• Styrene	100-42-5	< 1%	12.5%<=C: Xn; R20 12.5%<=C: Xi; R36/38
• Toluene	108-88-3	34% TO 44%	Not Listed
• Xylene	1330-20-7	< 1%	12.5%<=C: Xn; R20/21
• Zinc oxide	1314-13-2	< 0.3%	Not Listed
• Polychlorophene	9010-98-4	< 12%	Not Listed

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

• Naphtha, petroleum, solvent-refined light (primarily Hexane)	64741-84-0	25% TO 35%	T R:45-46-65 S:53-45
• Acetone	67-64-1	5% TO 10%	F Xi R:11-36-66-67 S:(2)-9-16-26
• Magnesium oxide	1309-48-4	< 1%	Not Listed
• Styrene	100-42-5	< 1%	Xn R:10-20-36/38 S:(2)-23
• Toluene	108-88-3	34% TO 44%	F Xn R:11-38-48/20-63-65-67 S:(2)-36/37-46-62
• Xylene	1330-20-7	< 1%	Xn R:10-20/21-38 S:(2)-25
• Zinc oxide	1314-13-2	< 0.3%	N R:50/53 S:60-61
• Polychlorophene	9010-98-4	< 12%	Not Listed

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

• Naphtha, petroleum, solvent-refined light (primarily Hexane)	64741-84-0	25% TO 35%	P
• Acetone	67-64-1	5% TO 10%	Not Listed
• Magnesium oxide	1309-48-4	< 1%	Not Listed
• Styrene	100-42-5	< 1%	D
• Toluene	108-88-3	34% TO 44%	Not Listed
• Xylene	1330-20-7	< 1%	C
• Zinc oxide	1314-13-2	< 0.3%	Not Listed
• Polychlorophene	9010-98-4	< 12%	Not Listed

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

• Naphtha, petroleum, solvent-refined light (primarily Hexane)	64741-84-0	25% TO 35%	S:53-45
• Acetone	67-64-1	5% TO 10%	S:(2)-9-16-26
• Magnesium oxide	1309-48-4	< 1%	Not Listed
• Styrene	100-42-5	< 1%	S:(2)-23
• Toluene	108-88-3	34% TO 44%	S:(2)-36/37-46-62
• Xylene	1330-20-7	< 1%	S:(2)-25
• Zinc oxide	1314-13-2	< 0.3%	S:60-61
• Polychlorophene	9010-98-4	< 12%	Not Listed

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

• Naphtha, petroleum, solvent-refined light (primarily Hexane)	64741-84-0	25% TO 35%	Not Listed
• Acetone	67-64-1	5% TO 10%	Hazard Class = 3 PG = II UN1090
• Magnesium oxide	1309-48-4	< 1%	Not Listed
• Styrene	100-42-5	< 1%	Hazard Class = 3 PG = III UN2055
• Toluene	108-88-3	34% TO 44%	Hazard Class = 3 PG = II UN1294
• Xylene	1330-20-7	< 1%	Hazard Class = 3 PG = II UN1307; Hazard Class = 3 PG = III UN1307
• Zinc oxide	1314-13-2	< 0.3%	Not Listed
• Polychlorophene	9010-98-4	< 12%	Not Listed

**Mexico - Regulated Substances**

• Naphtha, petroleum, solvent-refined light (primarily Hexane)	64741-84-0	25% TO 35%	Not Listed
• Acetone	67-64-1	5% TO 10%	UN1090
• Magnesium oxide	1309-48-4	< 1%	Not Listed
• Styrene	100-42-5	< 1%	UN2055
• Toluene	108-88-3	34% TO 44%	UN1294
• Xylene	1330-20-7	< 1%	UN1307; UN1307
• Zinc oxide	1314-13-2	< 0.3%	Not Listed
• Polychlorophene	9010-98-4	< 12%	Not Listed

**United States****Labor****U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals**

• Naphtha, petroleum, solvent-refined light (primarily Hexane)	64741-84-0	25% TO 35%	Not Listed
• Acetone	67-64-1	5% TO 10%	Not Listed
• Magnesium oxide	1309-48-4	< 1%	Not Listed
• Styrene	100-42-5	< 1%	Not Listed
• Toluene	108-88-3	34% TO 44%	Not Listed
• Xylene	1330-20-7	< 1%	Not Listed
• Zinc oxide	1314-13-2	< 0.3%	Not Listed
• Polychlorophene	9010-98-4	< 12%	Not Listed

**U.S. - OSHA - Specifically Regulated Chemicals**

• Naphtha, petroleum, solvent-refined light (primarily Hexane)	64741-84-0	25% TO 35%	Not Listed
• Acetone	67-64-1	5% TO 10%	Not Listed
• Magnesium oxide	1309-48-4	< 1%	Not Listed

• Styrene	100-42-5	< 1%	Not Listed
• Toluene	108-88-3	34% TO 44%	Not Listed
• Xylene	1330-20-7	< 1%	Not Listed
• Zinc oxide	1314-13-2	< 0.3%	Not Listed
• Polychlorophene	9010-98-4	< 12%	Not Listed

## Environment

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

• Naphtha, petroleum, solvent-refined light (primarily Hexane)	64741-84-0	25% TO 35%	Not Listed
• Acetone	67-64-1	5% TO 10%	Not Listed
• Magnesium oxide	1309-48-4	< 1%	Not Listed
• Styrene	100-42-5	< 1%	
• Toluene	108-88-3	34% TO 44%	
• Xylene	1330-20-7	< 1%	(isomers and mixtures)
• Zinc oxide	1314-13-2	< 0.3%	Not Listed
• Polychlorophene	9010-98-4	< 12%	Not Listed

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

• Naphtha, petroleum, solvent-refined light (primarily Hexane)	64741-84-0	25% TO 35%	Not Listed
• Acetone	67-64-1	5% TO 10%	5000 lb final RQ; 2270 kg final RQ
• Magnesium oxide	1309-48-4	< 1%	Not Listed
• Styrene	100-42-5	< 1%	1000 lb final RQ; 454 kg final RQ
• Toluene	108-88-3	34% TO 44%	1000 lb final RQ; 454 kg final RQ
• Xylene	1330-20-7	< 1%	100 lb final RQ; 45.4 kg final RQ
• Zinc oxide	1314-13-2	< 0.3%	Not Listed
• Polychlorophene	9010-98-4	< 12%	Not Listed

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

• Naphtha, petroleum, solvent-refined light (primarily Hexane)	64741-84-0	25% TO 35%	Not Listed
• Acetone	67-64-1	5% TO 10%	Not Listed
• Magnesium oxide	1309-48-4	< 1%	Not Listed
• Styrene	100-42-5	< 1%	Not Listed
• Toluene	108-88-3	34% TO 44%	Not Listed
• Xylene	1330-20-7	< 1%	Not Listed
• Zinc oxide	1314-13-2	< 0.3%	Not Listed
• Polychlorophene	9010-98-4	< 12%	Not Listed

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

• Naphtha, petroleum, solvent-refined light (primarily Hexane)	64741-84-0	25% TO 35%	Not Listed
• Acetone	67-64-1	5% TO 10%	Not Listed
• Magnesium oxide	1309-48-4	< 1%	Not Listed
• Styrene	100-42-5	< 1%	Not Listed
• Toluene	108-88-3	34% TO 44%	Not Listed
• Xylene	1330-20-7	< 1%	Not Listed

• Zinc oxide	1314-13-2	< 0.3%	Not Listed
• Polychlorophene	9010-98-4	< 12%	Not Listed

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

• Naphtha, petroleum, solvent-refined light (primarily Hexane)	64741-84-0	25% TO 35%	Not Listed
• Acetone	67-64-1	5% TO 10%	Not Listed
• Magnesium oxide	1309-48-4	< 1%	Not Listed
• Styrene	100-42-5	< 1%	0.1 % de minimis concentration
• Toluene	108-88-3	34% TO 44%	1.0 % de minimis concentration
• Xylene	1330-20-7	< 1%	1.0 % de minimis concentration
• Zinc oxide	1314-13-2	< 0.3%	Not Listed
• Polychlorophene	9010-98-4	< 12%	Not Listed

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

• Naphtha, petroleum, solvent-refined light (primarily Hexane)	64741-84-0	25% TO 35%	Not Listed
• Acetone	67-64-1	5% TO 10%	Not Listed
• Magnesium oxide	1309-48-4	< 1%	Not Listed
• Styrene	100-42-5	< 1%	Not Listed
• Toluene	108-88-3	34% TO 44%	Not Listed
• Xylene	1330-20-7	< 1%	Not Listed
• Zinc oxide	1314-13-2	< 0.3%	Not Listed
• Polychlorophene	9010-98-4	< 12%	Not Listed

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

• Naphtha, petroleum, solvent-refined light (primarily Hexane)	64741-84-0	25% TO 35%	Not Listed
• Acetone	67-64-1	5% TO 10%	Not Listed
• Magnesium oxide	1309-48-4	< 1%	Not Listed
• Styrene	100-42-5	< 1%	Not Listed
• Toluene	108-88-3	34% TO 44%	waste number U220
• Xylene	1330-20-7	< 1%	Not Listed
• Zinc oxide	1314-13-2	< 0.3%	Not Listed
• Polychlorophene	9010-98-4	< 12%	Not Listed

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

• Naphtha, petroleum, solvent-refined light (primarily Hexane)	64741-84-0	25% TO 35%	Not Listed
• Acetone	67-64-1	5% TO 10%	
• Magnesium oxide	1309-48-4	< 1%	Not Listed
• Styrene	100-42-5	< 1%	
• Toluene	108-88-3	34% TO 44%	
• Xylene	1330-20-7	< 1%	
• Zinc oxide	1314-13-2	< 0.3%	Not Listed
• Polychlorophene	9010-98-4	< 12%	Not Listed



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

• Naphtha, petroleum, solvent-refined light (primarily Hexane)	64741-84-0	25% TO 35%	Not Listed
• Acetone	67-64-1	5% TO 10%	Not Listed
• Magnesium oxide	1309-48-4	< 1%	Not Listed
• Styrene	100-42-5	< 1%	Not Listed
• Toluene	108-88-3	34% TO 44%	Not Listed
• Xylene	1330-20-7	< 1%	Not Listed
• Zinc oxide	1314-13-2	< 0.3%	Not Listed
• Polychlorophene	9010-98-4	< 12%	Not Listed

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

• Naphtha, petroleum, solvent-refined light (primarily Hexane)	64741-84-0	25% TO 35%	Not Listed
• Acetone	67-64-1	5% TO 10%	Not Listed
• Magnesium oxide	1309-48-4	< 1%	Not Listed
• Styrene	100-42-5	< 1%	Not Listed
• Toluene	108-88-3	34% TO 44%	developmental toxicity, initial date 1/1/91
• Xylene	1330-20-7	< 1%	Not Listed
• Zinc oxide	1314-13-2	< 0.3%	Not Listed
• Polychlorophene	9010-98-4	< 12%	Not Listed

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

• Naphtha, petroleum, solvent-refined light (primarily Hexane)	64741-84-0	25% TO 35%	Not Listed
• Acetone	67-64-1	5% TO 10%	Not Listed
• Magnesium oxide	1309-48-4	< 1%	Not Listed
• Styrene	100-42-5	< 1%	Not Listed
• Toluene	108-88-3	34% TO 44%	female reproductive toxicity, initial date 8/7/09
• Xylene	1330-20-7	< 1%	Not Listed
• Zinc oxide	1314-13-2	< 0.3%	Not Listed
• Polychlorophene	9010-98-4	< 12%	Not Listed

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

• Naphtha, petroleum, solvent-refined light (primarily Hexane)	64741-84-0	25% TO 35%	Not Listed
• Acetone	67-64-1	5% TO 10%	Not Listed
• Magnesium oxide	1309-48-4	< 1%	Not Listed
• Styrene	100-42-5	< 1%	Not Listed
• Toluene	108-88-3	34% TO 44%	Not Listed
• Xylene	1330-20-7	< 1%	Not Listed
• Zinc oxide	1314-13-2	< 0.3%	Not Listed
• Polychlorophene	9010-98-4	< 12%	Not Listed

**United States - Pennsylvania**

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

• Naphtha, petroleum, solvent-refined light (primarily Hexane)	64741-84-0	25% TO 35%	Not Listed
• Acetone	67-64-1	5% TO 10%	
• Magnesium oxide	1309-48-4	< 1%	Not Listed
• Styrene	100-42-5	< 1%	
• Toluene	108-88-3	34% TO 44%	
• Xylene	1330-20-7	< 1%	
• Zinc oxide	1314-13-2	< 0.3%	(fume)
• Polychlorophene	9010-98-4	< 12%	Not Listed

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

• Naphtha, petroleum, solvent-refined light (primarily Hexane)	64741-84-0	25% TO 35%	Not Listed
• Acetone	67-64-1	5% TO 10%	Not Listed
• Magnesium oxide	1309-48-4	< 1%	Not Listed
• Styrene	100-42-5	< 1%	Not Listed
• Toluene	108-88-3	34% TO 44%	Not Listed
• Xylene	1330-20-7	< 1%	Not Listed
• Zinc oxide	1314-13-2	< 0.3%	Not Listed
• Polychlorophene	9010-98-4	< 12%	Not Listed

**United States - Rhode Island****Labor****U.S. - Rhode Island - Hazardous Substance List**

• Naphtha, petroleum, solvent-refined light (primarily Hexane)	64741-84-0	25% TO 35%	Not Listed
• Acetone	67-64-1	5% TO 10%	Toxic; Flammable
• Magnesium oxide	1309-48-4	< 1%	Toxic (fume)
• Styrene	100-42-5	< 1%	Toxic; Flammable
• Toluene	108-88-3	34% TO 44%	Toxic (skin); Flammable (skin)
• Xylene	1330-20-7	< 1%	Toxic (skin); Flammable (skin)
• Zinc oxide	1314-13-2	< 0.3%	Toxic
• Polychlorophene	9010-98-4	< 12%	Not Listed

**15.2 Chemical Safety Assessment**

- No Chemical Safety Assessment has been carried out.

**Section 16 - Other Information**

<b>Last Revision Date</b>	• 07/February/2013
<b>Preparation Date</b>	• 07/February/2013

**Disclaimer/Statement of Liability**

- No data available

**Key to abbreviations**

NDA = No data available

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