

## Safety Data Sheet

## Firestone Building Products Company

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

## 1.1 Product identifier

**Product Name** • EcoWhite™ EPDM Splice Adhesive

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

**Relevant identified use(s)** • Construction Adhesive

## 1.3 Details of the supplier of the safety data sheet

**Manufacturer** • Firestone Building Products Company  
200 4th Avenue S  
Nashville, TN 37201-2208  
United States

firestonemsds@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 - H361fd
- Specific Target Organ Toxicity Repeated Exposure 2 - H373
- Hazardous to the aquatic environment Chronic 2 - H411

**DSD/DPD**

- Highly Flammable (F)
- Harmful (Xn)
- Irritant (Xi)
- Substances Toxic To Reproduction - Category 3
- Dangerous to the Environment (N)
- R11, R38, R48/20, R62, R63, R65, R67, R51, R53

## 2.2 Label Elements

**CLP**

**DANGER**



- Hazard statements** • H225 - Highly flammable liquid and vapour  
 H304 - May be fatal if swallowed and enters airways  
 H315 - Causes skin irritation  
 H336 - May cause drowsiness or dizziness  
 H361fd - Suspected of damaging fertility. 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.  
 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.  
 P363 - Wash contaminated clothing before reuse.  
 P332+P313 - If skin irritation occurs: Get medical advice/attention.  
 P321 - Specific treatment, see supplemental first aid information.  
 P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
 P331 - Do NOT induce vomiting.  
 P308+P313 - IF exposed or concerned: Get medical advice/attention.  
 P314 - Get medical advice/attention if you feel unwell.  
 P391 - Collect spillage.
- Storage/Disposal** • P403+P233 - Store in a well-ventilated place. Keep container tightly closed.  
 P235 - 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 inhalation.  
 R62 - Possible risk of impaired fertility.  
 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 - Toxic to aquatic organisms.  
 R53 - May cause long-term adverse effects in the aquatic environment.
- Safety phrases** • S9 - Keep container in a well ventilated place  
 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
  - Acute Toxicity Oral 4
  - Aspiration 1
  - Skin Irritation 2
  - Eye Irritation 2
  - Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation
  - Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects
  - Germ Cell Mutagenicity 1B
  - Carcinogenicity 2
  - Reproductive Toxicity 1B
  - Specific Target Organ Toxicity Repeated Exposure 1
  - Specific Target Organ Toxicity Repeated Exposure 2

## 2.2 Label elements

OSHA HCS 2012

### DANGER



- Hazard statements**
- Highly flammable liquid and vapour
  - Harmful if swallowed
  - May be fatal if swallowed and enters airways
  - Causes skin irritation
  - Causes serious eye irritation
  - May cause respiratory irritation
  - May cause drowsiness or dizziness
  - May cause genetic defects.
  - Suspected of causing cancer.
  - May damage fertility or the unborn child.
  - Causes damage to organs - Central Nervous System through prolonged or repeated exposure
  - May cause damage to organs - Nervous System through prolonged or repeated exposure

## Precautionary statements

- Prevention**
- Obtain special instructions before use.
  - Do not handle until all safety precautions have been read and understood.
  - Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking.
  - Keep container tightly closed.
  - Ground and/or bond container and receiving equipment.
  - Use explosion-proof electrical/ventilating/lighting/equipment.
  - Use only non-sparking tools.
  - Take precautionary measures against static discharge.
  - Do not breathe mist/vapours/spray.
  - Wash thoroughly after handling.
  - Do not eat, drink or smoke when using this product.
  - Wear protective gloves/protective clothing/eye protection/face protection.

- Response** • In case of fire: Use appropriate media for extinction.  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
 Call a POISON CENTER or doctor/physician if you feel unwell.  
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
 If skin irritation occurs: Get medical advice/attention.  
 Specific treatment, see supplemental first aid information.  
 Do NOT induce vomiting.  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 If eye irritation persists: Get medical advice/attention.  
 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician if you feel unwell.  
 Rinse mouth.  
 IF exposed or concerned: Get medical advice/attention.  
 Get medical advice/attention if you feel unwell.

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

- Supplemental information** • (Oral) 0-5 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



### WHMIS

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

## 2.3 Other hazards

### WHMIS

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

## Section 3 - Composition/Information on Ingredients

### 3.1 Substances

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

### 3.2 Mixtures

| Composition   |   |                   |  |   |          |
|---------------|---|-------------------|--|---|----------|
| Chemical Name | Identifiers   | %                 | LD50/LC50  | Classifications According to Regulation/Directive   | Comments |
| Toluene       | <b>CAS:</b> 108-88-3<br><b>EC Number:</b> 203-625-9<br><b>EU Index:</b> 601-021-00-3  | 25%<br>TO<br>50%  | Ingestion/Oral-Rat<br>LD50 • 636 mg/kg<br>Inhalation-Rat<br>LC50 • 49 g/m <sup>3</sup> 4<br>Hour(s)<br>Skin-Rabbit LD50 •<br>14100 µL/kg | <b>EU DSD/DPD:</b> Annex VI, Table 3.2: F R11 Xn R48/20-65 Xi R38 Repr. Cat. 3 R63 R67<br><b>EU CLP:</b> Annex VI, Table 3.1: Flam. Liq. 2, H225; Skin Irrit. 2, H315; Repr. 2, H361d; STOT SE 3: Narc., H336; STOT RE 2, H373; Asp. Tox. 1, H304<br><b>OSHA HCS 2012:</b> Flam. Liq. 2; Acute Tox. 4 (oral); Skin Irrit. 2; Eye Irrit. 2; Muta. 1B; Repr. 2; STOT SE 3: Narc.; STOT RE 1 (CNS, Inhl); Asp. Tox. 1                              | NDA      |
| Hexane        | <b>CAS:</b> 110-54-3<br><b>EC Number:</b> 203-777-6<br><b>EU Index:</b> 601-037-00-0  | 5% TO<br>20%      | Ingestion/Oral-Rat<br>LD50 • 25 g/kg<br>Inhalation-Rat LC50 •<br>48000 ppm 4 Hour(s)   | <b>EU DSD/DPD:</b> Annex VI, Table 3.2: F R11 Xi R38 N R51-53 Repr. Cat. 3 R62 Xn R65-48/20 R67<br><b>EU CLP:</b> Annex VI, Table 3.1: Flam. Liq. 2, H225; Repr. 2, H361f; Asp. Tox. 1, H304; STOT RE 2, H373; Skin Irrit. 2, H315; STOT SE 3: Narc., H336; Aquatic Chronic 2, H411<br><b>OSHA HCS 2012:</b> Flam. Liq. 2; Repr. 2; STOT RE 2 (CNS & Nervous System); Skin Irrit. 2; Eye Irrit. 2; STOT SE 3: Narc. & Resp. Irrit.; Asp. Tox. 1 | NDA      |
| Xylene        | <b>CAS:</b> 1330-20-7<br><b>EC Number:</b> 215-535-7<br><b>EU Index:</b> 601-022-00-9 | 2.5%<br>TO<br>10% | Ingestion/Oral-Rat<br>LD50 • 4300 mg/kg<br>Inhalation-Rat<br>LC50 • 5000 ppm 4<br>Hour(s)<br>Skin-Rabbit LD50 •<br>>1700 mg/kg           | <b>EU DSD/DPD:</b> Annex VI, Table 3.2: R10 Xn R20/21 Xi R38<br><b>EU CLP:</b> Annex VI, Table 3.1: Flam. Liq. 3, H226; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315<br><b>OSHA HCS 2012:</b> Flam. Liq. 3; Acute Tox. 4 (inhl); Skin Irrit. 2; Eye Irrit. 2; Repr. 1B (inhl); STOT SE 3: Resp. Irrit. & Narc.   | NDA      |
| Ethylbenzene  | <b>CAS:</b> 100-41-4<br><b>EC Number:</b> 202-849-4<br><b>EU Index:</b> 601-023-00-4  | <= 1%             | Skin-Rabbit LD50 •<br>17800 µL/kg<br>Ingestion/Oral-Rat<br>LD50 • 3500 mg/kg<br>Inhalation-Rabbit<br>LC50 • 4000 ppm 4<br>Hour(s)        | <b>EU DSD/DPD:</b> Annex VI, Table 3.2: F R11 Xn R20<br><b>EU CLP:</b> Annex VI, Table 3.1: Flam. Liq. 2, H225; Acute Tox. 4, H332<br><b>OSHA HCS 2012:</b> Flam. Liq. 2; Eye Irrit. 2, Repr. 2.; Carc. 2; STOT SE 3: Resp. Irrit & Narc.   | NDA      |
| Zinc oxide    | <b>CAS:</b> 1314-13-2<br><b>EC Number:</b> 215-222-5<br><b>EU Index:</b> 030-013-00-7 | <= 0.5%           | NDA  | <b>EU DSD/DPD:</b> Annex VI, Table 3.2: N R50-53<br><b>EU CLP:</b> Annex VI, Table 3.1: Aquatic Acute 1, H400; Aquatic Chronic 1. H410<br><b>OSHA HCS 2012:</b> Eye Irrit. 2  | 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

- 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

- Rinse mouth. Drink 1 - 2 glasses of water. Do NOT induce vomiting. Get medical attention.

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

- Refer to Section 11 - Toxicological Information.

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

#### Notes to Physician

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

## Section 5 - Firefighting Measures

### 5.1 Extinguishing media

**Suitable Extinguishing Media** • Carbon dioxide, sand, extinguishing powder.

**Unsuitable Extinguishing Media** • Do not use a direct stream of 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** • No data available

### 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.

### 7.3 Specific end use(s)

- Refer to Section 1.2 - Relevant identified uses.

## Section 8 - Exposure Controls/Personal Protection

### 8.1 Control parameters

| Exposure Limits/Guidelines |        |  |   |                                 |                               |  |
|----------------------------|--------|--|---|---------------------------------|-------------------------------|--|
|                            | Result | ACGIH                                  | Belgium                                       | Canada Alberta                  | Canada British Columbia       | Canada Manitoba                        |
| Zinc oxide<br>(1314-13-2)  | STELs  | 10 mg/m3 STEL<br>(respirable fraction) | 10 mg/m3 STEL<br>(fume)                       | 10 mg/m3 STEL<br>(respirable)   | 10 mg/m3 STEL<br>(respirable) | 10 mg/m3 STEL<br>(respirable fraction) |
|                            | TWAs   | 2 mg/m3 TWA<br>(respirable fraction)   | 10 mg/m3 TWA<br>(dust); 5 mg/m3 TWA<br>(fume) | 2 mg/m3 TWA<br>(respirable)     | 2 mg/m3 TWA<br>(respirable)   | 2 mg/m3 TWA<br>(respirable fraction)   |
| Ethylbenzene<br>(100-41-4) | STELs  | Not established                        | 125 ppm STEL; 551<br>mg/m3 STEL               | 125 ppm STEL; 543<br>mg/m3 STEL | Not established               | Not established                        |
|                            | TWAs   | 20 ppm TWA                             | 100 ppm TWA; 442<br>mg/m3 TWA                 | 100 ppm TWA; 434<br>mg/m3 TWA   | 20 ppm TWA                    | 20 ppm TWA                             |
| Xylene<br>(1330-20-7)      | STELs  | 150 ppm STEL                           | 100 ppm STEL; 442<br>mg/m3 STEL               | 150 ppm STEL; 651<br>mg/m3 STEL | 150 ppm STEL                  | 150 ppm STEL                           |
|                            | TWAs   | 100 ppm TWA                            | 50 ppm TWA; 221<br>mg/m3 TWA                  | 100 ppm TWA; 434<br>mg/m3 TWA   | 100 ppm TWA                   | 100 ppm TWA                            |
| Hexane<br>(110-54-3)       | TWAs   | 50 ppm TWA                             | 20 ppm TWA; 72<br>mg/m3 TWA                   | 50 ppm TWA; 176<br>mg/m3 TWA    | 20 ppm TWA                    | 50 ppm TWA                             |
| Toluene                    | STELs  | Not established                        | 100 ppm STEL; 384<br>mg/m3 STEL               | Not established                 | Not established               | Not established                        |

| (108-88-3)                          | TWAs   | 20 ppm TWA  | 22 ppm TWA; 77 mg/m3 TWA   | 50 ppm TWA; 188 mg/m3 TWA                                    | 20 ppm TWA   | 20 ppm TWA                            |
|-------------------------------------|--------|---|--|--|--|---------------------------------------|
| Exposure Limits/Guidelines (Con't.) |        |   |  |  |  |                                       |
|                                     | Result | Canada New Brunswick  | Canada Northwest Territories   | Canada Nova Scotia   | Canada Nunavut   | Canada Ontario                        |
| Zinc oxide (1314-13-2)              | STELs  | 10 mg/m3 STEL (fume)  | 10 mg/m3 STEL (fume)   | 10 mg/m3 STEL (respirable fraction)                          | 10 mg/m3 STEL (fume)   | 10 mg/m3 STEL (respirable)            |
|                                     | TWAs   | 10 mg/m3 TWA (particulate matter containing no Asbestos and <1% Crystalline silica, dust); 5 mg/m3 TWA (fume) | 5 mg/m3 TWA (fume); 5 mg/m3 TWA (dust, respirable mass); 10 mg/m3 TWA (total mass, dust) | 2 mg/m3 TWA (respirable fraction)                            | 5 mg/m3 TWA (fume); 5 mg/m3 TWA (dust, respirable mass); 10 mg/m3 TWA (total mass, dust) | 2 mg/m3 TWA (respirable)              |
| Ethylbenzene (100-41-4)             | STELs  | 125 ppm STEL; 543 mg/m3 STEL  | 125 ppm STEL; 542 mg/m3 STEL   | Not established  | 125 ppm STEL; 542 mg/m3 STEL   | Not established                       |
|                                     | TWAs   | 100 ppm TWA; 434 mg/m3 TWA  | 100 ppm TWA; 434 mg/m3 TWA   | 20 ppm TWA   | 100 ppm TWA; 434 mg/m3 TWA   | 20 ppm TWA                            |
| Xylene (1330-20-7)                  | STELs  | 150 ppm STEL; 651 mg/m3 STEL  | 150 ppm STEL; 652 mg/m3 STEL   | 150 ppm STEL   | 150 ppm STEL; 652 mg/m3 STEL   | 150 ppm STEL                          |
|                                     | TWAs   | 100 ppm TWA; 434 mg/m3 TWA  | 100 ppm TWA; 434 mg/m3 TWA   | 100 ppm TWA  | 100 ppm TWA; 434 mg/m3 TWA   | 100 ppm TWA                           |
| Hexane (110-54-3)                   | TWAs   | 50 ppm TWA; 176 mg/m3 TWA   | 100 ppm TWA; 352 mg/m3 TWA   | 50 ppm TWA   | 100 ppm TWA; 352 mg/m3 TWA   | 50 ppm TWA                            |
|                                     | STELs  | Not established   | 125 ppm STEL; 440 mg/m3 STEL   | Not established  | 125 ppm STEL; 440 mg/m3 STEL   | Not established                       |
| Toluene (108-88-3)                  | TWAs   | 50 ppm TWA; 188 mg/m3 TWA   | 100 ppm TWA; 375 mg/m3 TWA   | 20 ppm TWA   | 100 ppm TWA; 375 mg/m3 TWA   | 20 ppm TWA                            |
|                                     | STELs  | Not established   | 150 ppm STEL; 560 mg/m3 STEL   | Not established  | 150 ppm STEL; 560 mg/m3 STEL   | Not established                       |
| Exposure Limits/Guidelines (Con't.) |        |   |  |  |  |                                       |
|                                     | Result | Canada Quebec   | Canada Saskatchewan  | Canada Yukon   | Cyprus   | Denmark                               |
| Zinc oxide (1314-13-2)              | TWAs   | 10 mg/m3 TWAEV (containing no Asbestos and <1% Crystalline silica, total dust); 5 mg/m3 TWAEV (fume)          | 2 mg/m3 TWA (dust and fume, respirable fraction)   | 5 mg/m3 TWA (fume); 30 mppcf TWA (dust); 10 mg/m3 TWA (dust) | Not established  | 4 mg/m3 TWA (including vapour, as Zn) |
|                                     | STELs  | 10 mg/m3 STEV (fume)  | Not established  | 10 mg/m3 STEL (fume); 20 mg/m3 STEL (dust)                   | Not established  | Not established                       |
| Ethylbenzene (100-41-4)             | TWAs   | 100 ppm TWAEV; 434 mg/m3 TWAEV  | 100 ppm TWA  | 100 ppm TWA; 435 mg/m3 TWA                                   | 100 ppm TWA; 442 mg/m3 TWA   | 50 ppm TWA; 217 mg/m3 TWA             |
|                                     | STELs  | 125 ppm STEV; 543 mg/m3 STEV  | Not established  | 125 ppm STEL; 545 mg/m3 STEL                                 | 200 ppm STEL; 884 mg/m3 STEL   | Not established                       |
| Xylene (1330-20-7)                  | TWAs   | 100 ppm TWAEV; 434 mg/m3 TWAEV  | 100 ppm TWA  | 100 ppm TWA; 435 mg/m3 TWA                                   | 50 ppm TWA; 221 mg/m3 TWA  | 25 ppm TWA; 109 mg/m3 TWA             |
|                                     | STELs  | 150 ppm STEV; 651 mg/m3 STEV  | Not established  | 150 ppm STEL; 650 mg/m3 STEL                                 | 100 ppm STEL; 442 mg/m3 STEL   | Not established                       |
| Hexane                              | TWAs   | 50 ppm TWAEV; 176 mg/m3 TWAEV   | 50 ppm TWA   | 100 ppm TWA; 360 mg/m3 TWA                                   | 20 ppm TWA; 72 mg/m3 TWA   | 20 ppm TWA; 72 mg/m3 TWA              |



| (110-54-3)                          | STELs    | Not established               | Not established  | 125 ppm STEL; 450 mg/m3 STEL   | Not established              | Not established  |
|-------------------------------------|----------|-------------------------------|--|--|------------------------------|--|
| Toluene<br>(108-88-3)               | TWAs     | 50 ppm TWAEV; 188 mg/m3 TWAEV | 50 ppm TWA   | 100 ppm TWA; 375 mg/m3 TWA   | 50 ppm TWA; 192 mg/m3 TWA    | 25 ppm TWA; 94 mg/m3 TWA   |
|                                     | STELs    | Not established               | Not established  | 150 ppm STEL; 560 mg/m3 STEL   | 100 ppm STEL; 384 mg/m3 STEL | Not established  |
| Exposure Limits/Guidelines (Con't.) |          |                               |  |  |                              |  |
|                                     | Result   | Europe                        | Germany DFG  | Germany TRGS   | NIOSH                        | OSHA   |
| Zinc oxide<br>(1314-13-2)           | TWAs     | Not established               | Not established  | Not established  | 5 mg/m3 TWA (dust and fume)  | 5 mg/m3 TWA (fume); 15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction) |
|                                     | Ceilings | Not established               | 1 mg/m3 Peak (respirable fraction, fume)                       | Not established  | 15 mg/m3 Ceiling (dust)      | Not established  |
|                                     | STELs    | Not established               | Not established  | Not established  | 10 mg/m3 STEL (fume)         | Not established  |
|                                     | MAKs     | Not established               | 1 mg/m3 TWA MAK (fume, respirable fraction)                    | Not established  | Not established              | Not established  |
| Ethylbenzene<br>(100-41-4)          | TWAs     | Not established               | 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); 88 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 2) | 100 ppm TWA; 435 mg/m3 TWA   | 100 ppm TWA; 435 mg/m3 TWA   |
|                                     | STELs    | Not established               | Not established  | Not established  | 125 ppm STEL; 545 mg/m3 STEL | Not established  |
|                                     | Ceilings | Not established               | 40 ppm Peak; 176 mg/m3 Peak                                    | Not established  | Not established              | Not established  |
|                                     | MAKs     | Not established               | 20 ppm TWA MAK; 88 mg/m3 TWA MAK                               | Not established  | Not established              | Not established  |
| Xylene<br>(1330-20-7)               | TWAs     | Not established               | Not established  | 100 ppm TWA AGW (all isomers, exposure factor 2); 440 mg/m3 TWA AGW (all isomers, exposure factor 2)   | Not established              | 100 ppm TWA; 435 mg/m3 TWA   |
|                                     | Ceilings | Not established               | 200 ppm Peak (all isomers); 880 mg/m3 Peak (all isomers)       | Not established  | Not established              | Not established  |
|                                     | MAKs     | Not established               | 100 ppm TWA MAK (all isomers); 440 mg/m3 TWA MAK (all isomers) | Not established  | Not established              | Not established  |

|                       |          |  |   |   |  |   |
|-----------------------|----------|--|---|---|--|---|
| Hexane<br>(110-54-3)  | TWAs     | 20 ppm TWA; 72 mg/m <sup>3</sup> TWA     | Not established                               | 50 ppm TWA AGW (exposure factor 8); 180 mg/m <sup>3</sup> TWA AGW (exposure factor 8)   | 50 ppm TWA; 180 mg/m <sup>3</sup> TWA    | 500 ppm TWA; 1800 mg/m <sup>3</sup> TWA |
|                       | Ceilings | Not established                          | 400 ppm Peak; 1440 mg/m <sup>3</sup> Peak     | Not established   | Not established                          | Not established                         |
|                       | MAKs     | Not established                          | 50 ppm TWA MAK; 180 mg/m <sup>3</sup> TWA MAK | Not established   | Not established                          | Not established                         |
| Toluene<br>(108-88-3) | STELs    | 100 ppm STEL; 384 mg/m <sup>3</sup> STEL | Not established                               | Not established   | 150 ppm STEL; 560 mg/m <sup>3</sup> STEL | Not established                         |
|                       | TWAs     | 50 ppm TWA; 192 mg/m <sup>3</sup> 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/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 4) | 100 ppm TWA; 375 mg/m <sup>3</sup> TWA   | 200 ppm TWA                             |
|                       | Ceilings | Not established                          | 200 ppm Peak; 760 mg/m <sup>3</sup> Peak      | Not established   | Not established                          | 300 ppm Ceiling                         |
|                       | MAKs     | Not established                          | 50 ppm TWA MAK; 190 mg/m <sup>3</sup> TWA MAK | Not established   | Not established                          | Not established                         |

## Exposure Control Notations

### Cyprus

- Toluene (108-88-3): **Skin:** (Skin-potential for cutaneous absorption)
- Xylene (1330-20-7): **Skin:** (Skin-potential for cutaneous absorption)
- Ethylbenzene (100-41-4): **Skin:** (Skin-potential for cutaneous absorption)

### Germany TRGS

- Toluene (108-88-3): **Skin:** (skin notation)
- Xylene (1330-20-7): **Skin:** (skin notation (all isomers))
- Ethylbenzene (100-41-4): **Skin:** (skin notation)

### Germany DFG

- Toluene (108-88-3): **Pregnancy:** (no risk to embryo/fetus if exposure limits adhered to) | **Skin:** (skin notation)
- Hexane (110-54-3): **Pregnancy:** (no risk to embryo/fetus if exposure limits adhered to)
- Xylene (1330-20-7): **Pregnancy:** (classification not yet possible (all isomers)) | **Skin:** (skin notation (all isomers))
- Ethylbenzene (100-41-4): **Carcinogens:** (Category 4 (no significant contribution to human cancer)) | **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**

- Wear safety goggles.

**Skin/Body**

- Wear appropriate gloves.

**Environmental Exposure Controls**

- In case of spills, keep product clear of sewers, waterways or land areas. Dispose of waste product in accordance with national and local laws and regulations.

**Key to abbreviations**

ACGIH = American Conference of Governmental Industrial Hygiene

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

MAK = Maximale Arbeitsplatz Konzentration is the maximum permissible concentration

TWAEV = Time-Weighted Average Exposure Value

NIOSH = National Institute of Occupational Safety and Health

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

OSHA = Occupational Safety and Health Administration

**Section 9 - Physical and Chemical Properties****9.1 Information on Basic Physical and Chemical Properties**

| <b>Material Description</b>         |                                |                              |  |
|-------------------------------------|--------------------------------|------------------------------|--|
| Physical Form                       | Liquid                         | Appearance/Description       | Tan liquid with a characteristic odor. |
| Color                               | Tan                            | Odor                         | Characteristic                         |
| Odor Threshold                      | Data lacking                   |                              |  |
| <b>General Properties</b>           |                                |                              |  |
| Boiling Point                       | 69 °C(156.2 °F)                | Melting Point/Freezing Point | Data lacking                           |
| Decomposition Temperature           | Data lacking                   | pH                           | Data lacking                           |
| Specific Gravity/Relative Density   | = 0.876 Water=1                | Density                      | 7.307 lbs/gal                          |
| Water Solubility                    | Immiscible                     | Viscosity                    | Data lacking                           |
| Explosive Properties                | Data lacking                   | Oxidizing Properties:        | Data lacking                           |
| <b>Volatility</b>                   |                                |                              |  |
| Vapor Pressure                      | 120 mmHg (torr) @ 20 °C(68 °F) | Vapor Density                | Data lacking                           |
| Evaporation Rate                    | Data lacking                   |                              |  |
| <b>Flammability</b>                 |                                |                              |  |
| Flash Point                         | -26 °C(-14.8 °F)               | UEL                          | 7.4 %                                  |
| LEL                                 | 1.2 %                          | Autoignition                 | Data lacking                           |
| Flammability (solid, gas)           | Not relevant.                  |                              |  |
| <b>Environmental</b>                |                                |                              |  |
| 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

- Oxidizing agents.

### 10.6 Hazardous decomposition products

- Carbon monoxide, carbon dioxide, and hydrocarbons.

## Section 11 - Toxicological Information

### 11.1 Information on toxicological effects

|                      |           | Components   |
|----------------------|-----------|--|
| Toluene (25% TO 50%) | 108-88-3  | <p><b>Acute Toxicity:</b> Ingestion/Oral-Rat LD50 • 636 mg/kg; Inhalation-Rat LC50 • 49 g/m<sup>3</sup> 4 Hour(s); Inhalation-Human TCLo • 200 ppm; <i>Brain and Coverings:Recordings from specific areas of CNS; Behavioral:Antipsychotic; Blood:Changes in bone marrow not included above;</i> Inhalation-Human TCLo • 1500 mg/m<sup>3</sup> 8 Hour(s); <i>Sense Organs and Special Senses:Eye:Lacrimation; Sense Organs and Special Senses:Eye:Conjunctive irritation; Behavioral:Ataxia;</i> Inhalation-Man TCLo • 50 ppm; <i>Kidney, Ureter, and Bladder:Other changes in urine composition;</i> Skin-Rabbit LD50 • 14100 µL/kg;</p> <p><b>Irritation:</b> Eye-Rabbit • 2 mg 24 Hour(s) • Severe irritation; Skin-Rabbit • 20 mg 24 Hour(s) • Moderate irritation;</p> <p><b>Multi-dose Toxicity:</b> Inhalation-Mouse TCLo • 250 ppm 4 Day(s)-Continuous; <i>Behavioral:Convulsions or effect on seizure threshold; Behavioral:Abuse;</i> Inhalation-Mouse TCLo • 50 ppm 12 Week(s)-Intermittent; <i>Brain and Coverings:Other degenerative changes;</i> Inhalation-Rat TCLo • 10 ppm 6 Hour(s) 13 Week(s)-Intermittent; <i>Brain and Coverings:Other degenerative changes; Biochemical:Enzyme inhibition, induction, or change in blood or tissue levels:Multiple enzyme effects;</i></p> <p><b>Mutagen:</b> Micronucleus test • Ingestion/Oral-Mouse • 200 mg/kg; Sister chromatid exchange • Inhalation-Human • 252 µg/L 19 Year(s); Cytogenetic analysis • Inhalation-Rat • 5400 µg/m<sup>3</sup> 16 Week(s)-Intermittent;</p> <p><b>Reproductive:</b> Inhalation-Mouse TCLo • 500 mg/m<sup>3</sup> 24 Hour(s)(6-13D preg); <i>Reproductive Effects:Effects on Embryo or Fetus:Fetotoxicity (except death, e.g., stunted fetus);</i> Inhalation-Mouse TCLo • 200 ppm 7 Hour(s)(7-16D preg); <i>Reproductive Effects:Specific Developmental Abnormalities:Urogenital system</i></p> |
| Hexane (5% TO 20%)   | 110-54-3  | <p><b>Acute Toxicity:</b> Ingestion/Oral-Rat LD50 • 25 g/kg; Inhalation-Rat LC50 • 48000 ppm 4 Hour(s);</p> <p><b>Irritation:</b> Eye-Rabbit • 10 mg • Mild irritation;</p> <p><b>Reproductive:</b> Inhalation-Rat TCLo • 5000 ppm (6-19D preg); <i>Reproductive Effects:Specific Developmental Abnormalities:Musculoskeletal system; Reproductive Effects:Specific Developmental Abnormalities:Urogenital system</i></p>  |
| Xylene (2.5% TO 10%) | 1330-20-7 | <p><b>Acute Toxicity:</b> Ingestion/Oral-Rat LD50 • 4300 mg/kg; <i>Liver:Other changes; Kidney, Ureter, and Bladder:Other changes;</i> Inhalation-Rat LC50 • 5000 ppm 4 Hour(s); Inhalation-Man LCLo • 10000 ppm 6 Hour(s); <i>Behavioral:General anesthetic; Lungs, Thorax, or Respiration:Cyanosis; Blood:Other changes;</i> Inhalation-Human TCLo • 200 ppm; <i>Sense Organs and Special Senses:Olfaction:Other changes; Sense Organs and Special Senses:Eye:Conjunctive irritation; Lungs, Thorax, or Respiration:Other changes;</i> Skin-Rabbit LD50 • &gt;1700 mg/kg;</p> <p><b>Irritation:</b> Eye-Rabbit • 5 mg 24 Hour(s) • Severe irritation; Skin-Rabbit • 500 mg 24 Hour(s) • Moderate irritation;</p> <p><b>Reproductive:</b> Inhalation-Rat TCLo • 50 mg/m<sup>3</sup> 6 Hour(s)(1-21D preg); <i>Reproductive Effects:Effects on Fertility:Post-implantation mortality; Reproductive Effects:Effects on Embryo or Fetus:Fetotoxicity (except death, e.g., stunted fetus); Reproductive Effects:Specific Developmental Abnormalities:Craniofacial (including nose and tongue)</i></p>   |
| Ethylbenzene (<= 1%) | 100-41-4  | <p><b>Acute Toxicity:</b> Ingestion/Oral-Rat LD50 • 3500 mg/kg; Inhalation-Rat LC50 • 55000 mg/m<sup>3</sup> 2 Hour(s); Skin-Rabbit LD50 • 17800 µL/kg;</p> <p><b>Irritation:</b> Eye-Rabbit • 500 mg • Severe irritation; Skin-Rabbit • 15 mg 24 Hour(s)-Open • Mild irritation;</p> <p><b>Multi-dose Toxicity:</b> Inhalation-Rabbit TCLo • 100 mg/m<sup>3</sup> 4 Hour(s) 30 Week(s)-Intermittent; <i>Blood:Changes in serum composition (e.g., TP, bilirubin cholesterol); Blood:Other changes; Blood:Changes in leucocyte (WBC) count</i></p>   |
|                      |           | <p><b>Acute Toxicity:</b> Inhalation-Mouse LC50 • 2500 mg/m<sup>3</sup>;</p>   |

|                      |           |  |
|----------------------|-----------|--|
| Zinc oxide (<= 0.5%) | 1314-13-2 | <b>Irritation:</b> Eye-Rabbit • 500 mg 24 Hour(s) • Mild irritation; Skin-Rabbit • 500 mg 24 Hour(s) • Mild irritation;<br><b>Reproductive:</b> Ingestion/Oral-Rat TDLo • 6846 mg/kg (1-22D preg); <i>Reproductive Effects:Specific Developmental Abnormalities:Homeostasis</i> ; <i>Reproductive Effects:Effects on Newborn:Stillbirth</i> ; <i>Reproductive Effects:Effects on Newborn:Growth statistics (e.g., reduced weight gain)</i> |
|----------------------|-----------|--|

| GHS Properties                | Classification   |
|-------------------------------|--|
| Acute toxicity                | EU/CLP • Data lacking<br>OSHA HCS 2012 • Acute Toxicity - Oral 4 - ATEmix (oral) = 1231.11 mg/kg   |
| Skin corrosion/Irritation     | EU/CLP • Skin Irritation 2<br>OSHA HCS 2012 • Skin Irritation 2  |
| Serious eye damage/Irritation | EU/CLP • Data lacking<br>OSHA HCS 2012 • Eye Irritation 2  |
| Skin sensitization            | EU/CLP • Data lacking<br>OSHA HCS 2012 • Data lacking  |
| Respiratory sensitization     | EU/CLP • Data lacking<br>OSHA HCS 2012 • Data lacking  |
| Aspiration Hazard             | EU/CLP • Aspiration 1<br>OSHA HCS 2012 • Aspiration 1  |
| Carcinogenicity               | EU/CLP • Data lacking<br>OSHA HCS 2012 • Carcinogenicity 2   |
| Germ Cell Mutagenicity        | EU/CLP • Data lacking<br>OSHA HCS 2012 • Germ Cell Mutagenicity 1B   |
| Toxicity for Reproduction     | EU/CLP • Toxic to Reproduction 2<br>OSHA HCS 2012 • Toxic to Reproduction 1B   |
| STOT-SE                       | EU/CLP • Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects<br>OSHA HCS 2012 • Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects;<br>Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation |
| STOT-RE                       | EU/CLP • Specific Target Organ Toxicity Repeated Exposure 2<br>OSHA HCS 2012 • Specific Target Organ Toxicity Repeated Exposure 1; Specific Target Organ Toxicity Repeated Exposure 2  |

**Target Organs**

- Nervous System, Central Nervous System (CNS)

**Route(s) of entry/exposure**

- Inhalation, Skin, Eye, Ingestion

**Potential Health Effects****Inhalation****Acute (Immediate)**

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

**Chronic (Delayed)**

- No data available

**Skin****Acute (Immediate)**

- Causes skin irritation.

**Chronic (Delayed)**

- No data available.

**Eye****Acute (Immediate)**

- Causes serious eye irritation.

**Chronic (Delayed)**

- No data available.

**Ingestion****Acute (Immediate)**

- Harmful if swallowed. Material may be aspirated into the lungs during ingestion and/or subsequent vomiting. Aspiration of this material will cause severe lung injury, chemical

- Chronic (Delayed)** pneumonitis, pulmonary edema or death.
- No data available.
- Other**
- Chronic (Delayed)**
- Chronic exposure to hexane may produce peripheral neuropathy (motor sensory) and CNS abnormalities.
- Mutagenic Effects**
- Repeated or prolonged exposure to toluene may cause genetic defects.
- Carcinogenic Effects**
- Ethylbenzene is a confirmed animal carcinogen with unknown relevance to humans.

| Carcinogenic Effects |          |                              |
|----------------------|----------|------------------------------|
|                      | CAS      | IARC                         |
| Ethylbenzene         | 100-41-4 | Group 2B-Possible Carcinogen |

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

**Key to abbreviations**

|                           |                          |
|---------------------------|--------------------------|
| LC = Lethal Concentration | TC = Toxic Concentration |
| LD = Lethal Dose          | MLD = Mild               |
| MOD = Moderate            | TD = Toxic Dose          |
| SEV = Severe              |                          |

## 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, flammable         | 3                               | II                 | NDA                        |
| TDG       | UN1133         | ADHESIVES, FLAMMABLE         | 3                               | II                 | Potential Marine Pollutant |
| IMO/IMDG  | UN1133         | ADHESIVES, FLAMMABLE         | 3                               | II                 | NDA                        |
| ADN       | UN1133         | ADHESIVES, FLAMMABLE         | 3                               | II                 | NDA                        |
| ADR/RID   | UN1133         | ADHESIVES, FLAMMABLE         | 3                               | II                 | NDA                        |
| IATA/ICAO | UN1133         | Adhesives, flammable         | 3                               | II                 | NDA                        |

14.6 Special precautions for user • None specified.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code • Data lacking.

## Section 15 - Regulatory Information

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

SARA Hazard Classifications • Acute, Chronic, Fire

| State Right To Know |           |     |     |     |
|---------------------|-----------|-----|-----|-----|
| Component           | CAS       | MA  | NJ  | PA  |
| Ethylbenzene        | 100-41-4  | Yes | Yes | Yes |
| Hexane              | 110-54-3  | Yes | Yes | Yes |
| Toluene             | 108-88-3  | Yes | Yes | Yes |
| Xylene              | 1330-20-7 | Yes | Yes | Yes |
| Zinc oxide          | 1314-13-2 | Yes | Yes | Yes |

| Inventory    |           |            |             |           |           |      |
|--------------|-----------|------------|-------------|-----------|-----------|------|
| Component    | CAS       | Canada DSL | Canada NDSL | EU EINECS | EU ELNICS | TSCA |
| Ethylbenzene | 100-41-4  | Yes        | No          | Yes       | No        | Yes  |
| Hexane       | 110-54-3  | Yes        | No          | Yes       | No        | Yes  |
| Toluene      | 108-88-3  | Yes        | No          | Yes       | No        | Yes  |
| Xylene       | 1330-20-7 | Yes        | No          | Yes       | No        | Yes  |
| Zinc oxide   | 1314-13-2 | Yes        | No          | Yes       | No        | Yes  |

## Belgium

### Labor

#### Belgium - Substances and Preparations - Carcinogens and Mutagens

|                                |           |            |
|--------------------------------|-----------|------------|
| • Ethylbenzene                 | 100-41-4  | Not Listed |
| • Toluene                      | 108-88-3  | Not Listed |
| • Xylene                       | 1330-20-7 | Not Listed |
| • Zinc oxide                   | 1314-13-2 | Not Listed |
| • Zinc oxide as Zinc compounds |           | Not Listed |
| • Hexane                       | 110-54-3  | Not Listed |

## Bulgaria

**Environment****Bulgaria - Air Quality - Maximum Admissible Hazardous Contaminant Levels - 24 Hour**

|                                |           |                  |
|--------------------------------|-----------|------------------|
| • Ethylbenzene                 | 100-41-4  | 0.02 mg/m3 MAHCL |
| • Toluene                      | 108-88-3  | 0.25 mg/m3 MAHCL |
| • Xylene                       | 1330-20-7 | 0.1 mg/m3 MAHCL  |
| • Zinc oxide                   | 1314-13-2 | Not Listed       |
| • Zinc oxide as Zinc compounds |           | Not Listed       |
| • Hexane                       | 110-54-3  | Not Listed       |

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

|                                |           |                  |
|--------------------------------|-----------|------------------|
| • Ethylbenzene                 | 100-41-4  | 0.02 mg/m3 MAHCL |
| • Toluene                      | 108-88-3  | Not Listed       |
| • Xylene                       | 1330-20-7 | Not Listed       |
| • Zinc oxide                   | 1314-13-2 | Not Listed       |
| • Zinc oxide as Zinc compounds |           | Not Listed       |
| • Hexane                       | 110-54-3  | 60.0 mg/m3 MAHCL |

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

|                                |           |            |
|--------------------------------|-----------|------------|
| • Ethylbenzene                 | 100-41-4  | Not Listed |
| • Toluene                      | 108-88-3  | Not Listed |
| • Xylene                       | 1330-20-7 | Not Listed |
| • Zinc oxide                   | 1314-13-2 | Not Listed |
| • Zinc oxide as Zinc compounds |           | Not Listed |
| • Hexane                       | 110-54-3  | Not Listed |

**Canada****Labor****Canada - WHMIS - Classifications of Substances**

|                                |           |   |
|--------------------------------|-----------|---|
| • Ethylbenzene                 | 100-41-4  | B2, D2A, D2B  |
| • Toluene                      | 108-88-3  | B2, D2A, D2B  |
| • Xylene                       | 1330-20-7 | B2, D2A, D2B  |
| • Zinc oxide                   | 1314-13-2 | Uncontrolled product according to WHMIS classification criteria |
| • Zinc oxide as Zinc compounds |           | Not Listed  |
| • Hexane                       | 110-54-3  | B2, D2A, D2B  |

**Canada - WHMIS - Ingredient Disclosure List**

|                                |           |            |
|--------------------------------|-----------|------------|
| • Ethylbenzene                 | 100-41-4  | 0.1 %      |
| • Toluene                      | 108-88-3  | 1 %        |
| • Xylene                       | 1330-20-7 | Not Listed |
| • Zinc oxide                   | 1314-13-2 | 1 %        |
| • Zinc oxide as Zinc compounds |           | Not Listed |
| • Hexane                       | 110-54-3  | 1 %        |

**Environment****Canada - 2004 NPRI (National Pollutant Release Inventory)**

|                                |           |  |
|--------------------------------|-----------|--|
| • Ethylbenzene                 | 100-41-4  | Part 1, Group 1 Substance                      |
| • Toluene                      | 108-88-3  | Part 1, Group 1 Substance;<br>Part 5 Substance |
| • Xylene                       | 1330-20-7 | Part 1, Group 1 Substance;<br>Part 5 Substance |
| • Zinc oxide                   | 1314-13-2 | Not Listed                                     |
| • Zinc oxide as Zinc compounds |           | Part 1, Group 1 Substance                      |



|  |           |   |
|--|-----------|---|
| • Hexane   | 110-54-3  | Part 1, Group 1 Substance;<br>Part 5 Substance                |
| <b>Canada - 2005 NPRI (National Pollutant Release Inventory)</b>       |           |   |
| • Ethylbenzene   | 100-41-4  | Part 1, Group 1 Substance                                     |
| • Toluene  | 108-88-3  | Part 1, Group 1 Substance;<br>Part 5 Substance                |
| • Xylene   | 1330-20-7 | Part 1, Group 1 Substance;<br>Part 5 Substance                |
| • Zinc oxide   | 1314-13-2 | Not Listed  |
| • Zinc oxide as Zinc compounds   |           | Part 1, Group 1 Substance                                     |
| • Hexane   | 110-54-3  | Part 1, Group 1 Substance;<br>Part 5 Substance                |
| <b>Canada - CEPA - Greenhouse Gases Subject to Mandatory Reporting</b> |           |   |
| • Ethylbenzene   | 100-41-4  | Not Listed  |
| • Toluene  | 108-88-3  | Not Listed  |
| • Xylene   | 1330-20-7 | Not Listed  |
| • Zinc oxide   | 1314-13-2 | Not Listed  |
| • Zinc oxide as Zinc compounds   |           | Not Listed  |
| • Hexane   | 110-54-3  | Not Listed  |
| <b>Canada - CEPA - Priority Substances List</b>                        |           |   |
| • Ethylbenzene   | 100-41-4  | Not Listed  |
| • Toluene  | 108-88-3  | Priority Substance List 1<br>(substance not considered toxic) |
| • Xylene   | 1330-20-7 | Priority Substance List 1<br>(substance not considered toxic) |
| • Zinc oxide   | 1314-13-2 | Not Listed  |
| • Zinc oxide as Zinc compounds   |           | Not Listed  |
| • Hexane   | 110-54-3  | Not Listed  |
| <b>Canada - DWQ (Drinking Water Quality) - IMACs</b>                   |           |   |
| • Ethylbenzene   | 100-41-4  | Not Listed  |
| • Toluene  | 108-88-3  | Not Listed  |
| • Xylene   | 1330-20-7 | Not Listed  |
| • Zinc oxide   | 1314-13-2 | Not Listed  |
| • Zinc oxide as Zinc compounds   |           | Not Listed  |
| • Hexane   | 110-54-3  | Not Listed  |

|  |           |            |
|--|-----------|------------|
| <b>Other</b>   |           |            |
| <b>Canada - Accelerated Reduction/Elimination of Toxics (ARET)</b> |           |            |
| • Ethylbenzene   | 100-41-4  | Not Listed |
| • Toluene  | 108-88-3  | Not Listed |
| • Xylene   | 1330-20-7 | Not Listed |
| • Zinc oxide   | 1314-13-2 | Not Listed |
| • Zinc oxide as Zinc compounds                                     |           | Not Listed |
| • Hexane   | 110-54-3  | Not Listed |

## Canada New Brunswick

|   |          |            |
|---|----------|------------|
| <b>Environment</b>  |          |            |
| <b>Canada - New Brunswick - Ozone Depleting Substances - Schedule A</b> |          |            |
| • Ethylbenzene  | 100-41-4 | Not Listed |

|                                |           |            |
|--------------------------------|-----------|------------|
| • Toluene                      | 108-88-3  | Not Listed |
| • Xylene                       | 1330-20-7 | Not Listed |
| • Zinc oxide                   | 1314-13-2 | Not Listed |
| • Zinc oxide as Zinc compounds |           | Not Listed |
| • Hexane                       | 110-54-3  | Not Listed |

**Canada - New Brunswick - Ozone Depleting Substances - Schedule B**

|                                |           |            |
|--------------------------------|-----------|------------|
| • Ethylbenzene                 | 100-41-4  | Not Listed |
| • Toluene                      | 108-88-3  | Not Listed |
| • Xylene                       | 1330-20-7 | Not Listed |
| • Zinc oxide                   | 1314-13-2 | Not Listed |
| • Zinc oxide as Zinc compounds |           | Not Listed |
| • Hexane                       | 110-54-3  | Not Listed |

**Denmark****Environment****Denmark - List of Undesirable Substances - Product Groups/Function**

|                                |           |  |
|--------------------------------|-----------|--|
| • Ethylbenzene                 | 100-41-4  | Not Listed   |
| • Toluene                      | 108-88-3  | Solvents in a wide range of products including paints, coatings and cooling lubricants (listed under Organic solvents) |
| • Xylene                       | 1330-20-7 | Not Listed   |
| • Zinc oxide                   | 1314-13-2 | Not Listed   |
| • Zinc oxide as Zinc compounds |           | Not Listed   |
| • Hexane                       | 110-54-3  | Solvents   |

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

|                                |           |  |
|--------------------------------|-----------|--|
| • Ethylbenzene                 | 100-41-4  | F; R11 Xn; R20   |
| • Toluene                      | 108-88-3  | F; R11 Xi; R38 Xn; R48/20-65 Repr.Cat.3; R63 R67           |
| • Xylene                       | 1330-20-7 | R10 Xn; R20/21 Xi; R38                                     |
| • Zinc oxide                   | 1314-13-2 | N; R50-53  |
| • Zinc oxide as Zinc compounds |           | Not Listed   |
| • Hexane                       | 110-54-3  | F; R11 Xi; R38 N; R51-53 Repr.Cat.3; R62 Xn; R65-48/20 R67 |

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

|                                |           |                      |
|--------------------------------|-----------|----------------------|
| • Ethylbenzene                 | 100-41-4  | Not Listed           |
| • Toluene                      | 108-88-3  | Not Listed           |
| • Xylene                       | 1330-20-7 | 12.5%≤C: Xn; R:20/21 |
| • Zinc oxide                   | 1314-13-2 | Not Listed           |
| • Zinc oxide as Zinc compounds |           | Not Listed           |
| • Hexane                       | 110-54-3  | 5%≤C: Xn; R:48/20    |

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

|                |           |   |
|----------------|-----------|---|
| • Ethylbenzene | 100-41-4  | F Xn R:11-20 S:(2)-16-24/25-29                |
| • Toluene      | 108-88-3  | F Xn R:11-38-48/20-63-65-67 S:(2)-36/37-46-62 |
| • Xylene       | 1330-20-7 | Xn R:10-20/21-38 S:(2)-25                     |

|                                |           |  |
|--------------------------------|-----------|--|
| • Zinc oxide                   | 1314-13-2 | N R:50/53 S:60-61  |
| • Zinc oxide as Zinc compounds |           | Not Listed   |
| • Hexane                       | 110-54-3  | F Xn N R:11-38-48/20-62-65-67-51/53 S:(2)-9-16-29-33-36/37-61-62 |

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

|                                |           |            |
|--------------------------------|-----------|------------|
| • Ethylbenzene                 | 100-41-4  | Not Listed |
| • Toluene                      | 108-88-3  | Not Listed |
| • Xylene                       | 1330-20-7 | C          |
| • Zinc oxide                   | 1314-13-2 | Not Listed |
| • Zinc oxide as Zinc compounds |           | Not Listed |
| • Hexane                       | 110-54-3  | Not Listed |

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

|                                |           |                              |
|--------------------------------|-----------|------------------------------|
| • Ethylbenzene                 | 100-41-4  | S:(2)-16-24/25-29            |
| • Toluene                      | 108-88-3  | S:(2)-36/37-46-62            |
| • Xylene                       | 1330-20-7 | S:(2)-25                     |
| • Zinc oxide                   | 1314-13-2 | S:60-61                      |
| • Zinc oxide as Zinc compounds |           | Not Listed                   |
| • Hexane                       | 110-54-3  | S:(2)-9-16-29-33-36/37-61-62 |

**Germany****Labor****Germany - Immission Control - Qualifying Quantities for Major Accident Prevention**

|                                |           |            |
|--------------------------------|-----------|------------|
| • Ethylbenzene                 | 100-41-4  | Not Listed |
| • Toluene                      | 108-88-3  | Not Listed |
| • Xylene                       | 1330-20-7 | Not Listed |
| • Zinc oxide                   | 1314-13-2 | Not Listed |
| • Zinc oxide as Zinc compounds |           | Not Listed |
| • Hexane                       | 110-54-3  | Not Listed |

**Germany - Immission Control - Qualifying Quantities for Safety Reporting**

|                                |           |            |
|--------------------------------|-----------|------------|
| • Ethylbenzene                 | 100-41-4  | Not Listed |
| • Toluene                      | 108-88-3  | Not Listed |
| • Xylene                       | 1330-20-7 | Not Listed |
| • Zinc oxide                   | 1314-13-2 | Not Listed |
| • Zinc oxide as Zinc compounds |           | Not Listed |
| • Hexane                       | 110-54-3  | Not Listed |

**Germany - TRGS 505 - Specific Lead Regulations**

|                                |           |            |
|--------------------------------|-----------|------------|
| • Ethylbenzene                 | 100-41-4  | Not Listed |
| • Toluene                      | 108-88-3  | Not Listed |
| • Xylene                       | 1330-20-7 | Not Listed |
| • Zinc oxide                   | 1314-13-2 | Not Listed |
| • Zinc oxide as Zinc compounds |           | Not Listed |
| • Hexane                       | 110-54-3  | Not Listed |

**Germany - TRGS 511 - Specific Ammonium Nitrate Regulations**

|                                |           |            |
|--------------------------------|-----------|------------|
| • Ethylbenzene                 | 100-41-4  | Not Listed |
| • Toluene                      | 108-88-3  | Not Listed |
| • Xylene                       | 1330-20-7 | Not Listed |
| • Zinc oxide                   | 1314-13-2 | Not Listed |
| • Zinc oxide as Zinc compounds |           | Not Listed |

|          |          |            |
|----------|----------|------------|
| • Hexane | 110-54-3 | Not Listed |
|----------|----------|------------|

## Environment

### Germany - TA Luft - Types and Classes

|                                |           |            |
|--------------------------------|-----------|------------|
| • Ethylbenzene                 | 100-41-4  | Not Listed |
| • Toluene                      | 108-88-3  | Not Listed |
| • Xylene                       | 1330-20-7 | Not Listed |
| • Zinc oxide                   | 1314-13-2 | Not Listed |
| • Zinc oxide as Zinc compounds |           | Not Listed |
| • Hexane                       | 110-54-3  | Not Listed |

### Germany - TA Luft - Emission Limits for Carcinogenic Substances

|                                |           |            |
|--------------------------------|-----------|------------|
| • Ethylbenzene                 | 100-41-4  | Not Listed |
| • Toluene                      | 108-88-3  | Not Listed |
| • Xylene                       | 1330-20-7 | Not Listed |
| • Zinc oxide                   | 1314-13-2 | Not Listed |
| • Zinc oxide as Zinc compounds |           | Not Listed |
| • Hexane                       | 110-54-3  | Not Listed |

### Germany - TA Luft - Emission Limits for Fibers

|                                |           |            |
|--------------------------------|-----------|------------|
| • Ethylbenzene                 | 100-41-4  | Not Listed |
| • Toluene                      | 108-88-3  | Not Listed |
| • Xylene                       | 1330-20-7 | Not Listed |
| • Zinc oxide                   | 1314-13-2 | Not Listed |
| • Zinc oxide as Zinc compounds |           | Not Listed |
| • Hexane                       | 110-54-3  | Not Listed |

### Germany - TA Luft - Emission Limits for Inorganic Dusts

|                                |           |            |
|--------------------------------|-----------|------------|
| • Ethylbenzene                 | 100-41-4  | Not Listed |
| • Toluene                      | 108-88-3  | Not Listed |
| • Xylene                       | 1330-20-7 | Not Listed |
| • Zinc oxide                   | 1314-13-2 | Not Listed |
| • Zinc oxide as Zinc compounds |           | Not Listed |
| • Hexane                       | 110-54-3  | Not Listed |

### Germany - TA Luft - Emission Limits for Inorganic Gases

|                                |           |            |
|--------------------------------|-----------|------------|
| • Ethylbenzene                 | 100-41-4  | Not Listed |
| • Toluene                      | 108-88-3  | Not Listed |
| • Xylene                       | 1330-20-7 | Not Listed |
| • Zinc oxide                   | 1314-13-2 | Not Listed |
| • Zinc oxide as Zinc compounds |           | Not Listed |
| • Hexane                       | 110-54-3  | Not Listed |

### Germany - TA Luft - Emission Limits for Organic Substances

|                                |           |            |
|--------------------------------|-----------|------------|
| • Ethylbenzene                 | 100-41-4  | Not Listed |
| • Toluene                      | 108-88-3  | Not Listed |
| • Xylene                       | 1330-20-7 | Not Listed |
| • Zinc oxide                   | 1314-13-2 | Not Listed |
| • Zinc oxide as Zinc compounds |           | Not Listed |
| • Hexane                       | 110-54-3  | Not Listed |

### Germany - Water Classification (VwVwS) - Annex 1

|                |           |            |
|----------------|-----------|------------|
| • Ethylbenzene | 100-41-4  | Not Listed |
| • Toluene      | 108-88-3  | Not Listed |
| • Xylene       | 1330-20-7 | Not Listed |

|                                |           |            |
|--------------------------------|-----------|------------|
| • Zinc oxide                   | 1314-13-2 | Not Listed |
| • Zinc oxide as Zinc compounds |           | Not Listed |
| • Hexane                       | 110-54-3  | Not Listed |

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

|                                |           |  |
|--------------------------------|-----------|--|
| • Ethylbenzene                 | 100-41-4  | ID Number 99, hazard class 1<br>- low hazard to waters |
| • Toluene                      | 108-88-3  | ID Number 194, hazard class 2<br>- hazard to waters    |
| • Xylene                       | 1330-20-7 | ID Number 206, hazard class 2<br>- hazard to waters    |
| • Zinc oxide                   | 1314-13-2 | Not Listed   |
| • Zinc oxide as Zinc compounds |           | Not Listed   |
| • Hexane                       | 110-54-3  | ID Number 124, hazard class 2<br>- hazard to waters    |

**Germany - Water Classification (VwVwS) - Annex 3**

|                                |           |  |
|--------------------------------|-----------|--|
| • Ethylbenzene                 | 100-41-4  | Not Listed   |
| • Toluene                      | 108-88-3  | Not Listed   |
| • Xylene                       | 1330-20-7 | Not Listed   |
| • Zinc oxide                   | 1314-13-2 | ID Number 2187, hazard class<br>2 - hazard to waters |
| • Zinc oxide as Zinc compounds |           | Not Listed   |
| • Hexane                       | 110-54-3  | Not Listed   |

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

|                                |           |            |
|--------------------------------|-----------|------------|
| • Ethylbenzene                 | 100-41-4  | Not Listed |
| • Toluene                      | 108-88-3  | Not Listed |
| • Xylene                       | 1330-20-7 | Not Listed |
| • Zinc oxide                   | 1314-13-2 | Not Listed |
| • Zinc oxide as Zinc compounds |           | Not Listed |
| • Hexane                       | 110-54-3  | Not Listed |

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

|                                |           |            |
|--------------------------------|-----------|------------|
| • Ethylbenzene                 | 100-41-4  | Not Listed |
| • Toluene                      | 108-88-3  | Not Listed |
| • Xylene                       | 1330-20-7 | Not Listed |
| • Zinc oxide                   | 1314-13-2 | Not Listed |
| • Zinc oxide as Zinc compounds |           | Not Listed |
| • Hexane                       | 110-54-3  | Not Listed |

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

|                                |           |                              |
|--------------------------------|-----------|------------------------------|
| • Ethylbenzene                 | 100-41-4  | (listed under Ethyl benzene) |
| • Toluene                      | 108-88-3  |                              |
| • Xylene                       | 1330-20-7 | (isomers and mixtures)       |
| • Zinc oxide                   | 1314-13-2 | Not Listed                   |
| • Zinc oxide as Zinc compounds |           | Not Listed                   |
| • Hexane                       | 110-54-3  |                              |

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

|                |          |                                      |
|----------------|----------|--------------------------------------|
| • Ethylbenzene | 100-41-4 | 1000 lb final RQ; 454 kg final<br>RQ |
|----------------|----------|--------------------------------------|

|                                |           |                                    |
|--------------------------------|-----------|------------------------------------|
| • Toluene                      | 108-88-3  | 1000 lb final RQ; 454 kg final RQ  |
| • Xylene                       | 1330-20-7 | 100 lb final RQ; 45.4 kg final RQ  |
| • Zinc oxide                   | 1314-13-2 | Not Listed                         |
| • Zinc oxide as Zinc compounds |           | Not Listed                         |
| • Hexane                       | 110-54-3  | 5000 lb final RQ; 2270 kg final RQ |

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

|                                |           |            |
|--------------------------------|-----------|------------|
| • Ethylbenzene                 | 100-41-4  | Not Listed |
| • Toluene                      | 108-88-3  | Not Listed |
| • Xylene                       | 1330-20-7 | Not Listed |
| • Zinc oxide                   | 1314-13-2 | Not Listed |
| • Zinc oxide as Zinc compounds |           | Not Listed |
| • Hexane                       | 110-54-3  | Not Listed |

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

|                                |           |            |
|--------------------------------|-----------|------------|
| • Ethylbenzene                 | 100-41-4  | Not Listed |
| • Toluene                      | 108-88-3  | Not Listed |
| • Xylene                       | 1330-20-7 | Not Listed |
| • Zinc oxide                   | 1314-13-2 | Not Listed |
| • Zinc oxide as Zinc compounds |           | Not Listed |
| • Hexane                       | 110-54-3  | Not Listed |

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

|                                |           |            |
|--------------------------------|-----------|------------|
| • Ethylbenzene                 | 100-41-4  | Not Listed |
| • Toluene                      | 108-88-3  | Not Listed |
| • Xylene                       | 1330-20-7 | Not Listed |
| • Zinc oxide                   | 1314-13-2 | Not Listed |
| • Zinc oxide as Zinc compounds |           | Not Listed |
| • Hexane                       | 110-54-3  | Not Listed |

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

|                                |           |   |
|--------------------------------|-----------|---|
| • Ethylbenzene                 | 100-41-4  | 0.1 % de minimis concentration                          |
| • Toluene                      | 108-88-3  | 1.0 % de minimis concentration                          |
| • Xylene                       | 1330-20-7 | 1.0 % de minimis concentration                          |
| • Zinc oxide                   | 1314-13-2 | Not Listed  |
| • Zinc oxide as Zinc compounds |           | 1.0 % de minimis concentration (Chemical Category N982) |
| • Hexane                       | 110-54-3  | 1.0 % de minimis concentration                          |

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

|                                |           |            |
|--------------------------------|-----------|------------|
| • Ethylbenzene                 | 100-41-4  | Not Listed |
| • Toluene                      | 108-88-3  | Not Listed |
| • Xylene                       | 1330-20-7 | Not Listed |
| • Zinc oxide                   | 1314-13-2 | Not Listed |
| • Zinc oxide as Zinc compounds |           | Not Listed |
| • Hexane                       | 110-54-3  | Not Listed |

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

|                                |           |   |
|--------------------------------|-----------|---|
| • Ethylbenzene                 | 100-41-4  | Included in waste stream:<br>F039   |
| • Toluene                      | 108-88-3  | Included in waste streams:<br>F005, F024, F025, F039, K015,<br>K036, K037, K149, K151 |
| • Xylene                       | 1330-20-7 | Included in waste stream:<br>F039   |
| • Zinc oxide                   | 1314-13-2 | Not Listed  |
| • Zinc oxide as Zinc compounds |           | Not Listed  |
| • Hexane                       | 110-54-3  | Not Listed  |

**U.S. - RCRA (Resource Conservation & Recovery Act) - Constituents for Detection Monitoring**

|                                |           |            |
|--------------------------------|-----------|------------|
| • Ethylbenzene                 | 100-41-4  |            |
| • Toluene                      | 108-88-3  |            |
| • Xylene                       | 1330-20-7 |            |
| • Zinc oxide                   | 1314-13-2 | Not Listed |
| • Zinc oxide as Zinc compounds |           | Not Listed |
| • Hexane                       | 110-54-3  | Not Listed |

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

|                                |           |                   |
|--------------------------------|-----------|-------------------|
| • Ethylbenzene                 | 100-41-4  | Not Listed        |
| • Toluene                      | 108-88-3  | waste number U220 |
| • Xylene                       | 1330-20-7 | Not Listed        |
| • Zinc oxide                   | 1314-13-2 | Not Listed        |
| • Zinc oxide as Zinc compounds |           | Not Listed        |
| • Hexane                       | 110-54-3  | Not Listed        |

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

|                                |           |            |
|--------------------------------|-----------|------------|
| • Ethylbenzene                 | 100-41-4  |            |
| • Toluene                      | 108-88-3  |            |
| • Xylene                       | 1330-20-7 |            |
| • Zinc oxide                   | 1314-13-2 | Not Listed |
| • Zinc oxide as Zinc compounds |           | Not Listed |
| • Hexane                       | 110-54-3  | Not Listed |

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

|                                |           |  |
|--------------------------------|-----------|--|
| • Ethylbenzene                 | 100-41-4  | 0.057 mg/L (wastewater); 10<br>mg/kg (nonwastewater) |
| • Toluene                      | 108-88-3  | 0.080 mg/L (wastewater); 10<br>mg/kg (nonwastewater) |
| • Xylene                       | 1330-20-7 | 0.32 mg/L (wastewater); 30<br>mg/kg (nonwastewater)  |
| • Zinc oxide                   | 1314-13-2 | Not Listed   |
| • Zinc oxide as Zinc compounds |           | Not Listed   |
| • Hexane                       | 110-54-3  | Not Listed   |

**U.S. - RCRA (Resource Conservation & Recovery Act) - TSD Facilities Ground Water Monitoring**

|                                |           |            |
|--------------------------------|-----------|------------|
| • Ethylbenzene                 | 100-41-4  |            |
| • Toluene                      | 108-88-3  |            |
| • Xylene                       | 1330-20-7 | (total)    |
| • Zinc oxide                   | 1314-13-2 | Not Listed |
| • Zinc oxide as Zinc compounds |           | Not Listed |
| • Hexane                       | 110-54-3  | Not Listed |

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

|                                |           |                                     |
|--------------------------------|-----------|-------------------------------------|
| • Ethylbenzene                 | 100-41-4  | Not Listed                          |
| • Toluene                      | 108-88-3  | waste number U220                   |
| • Xylene                       | 1330-20-7 | waste number U239 (Ignitable waste) |
| • Zinc oxide                   | 1314-13-2 | Not Listed                          |
| • Zinc oxide as Zinc compounds |           | Not Listed                          |
| • Hexane                       | 110-54-3  | Not Listed                          |

## United States - California

### Environment

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

|                                |           |                                  |
|--------------------------------|-----------|----------------------------------|
| • Ethylbenzene                 | 100-41-4  | carcinogen, initial date 6/11/04 |
| • Toluene                      | 108-88-3  | Not Listed                       |
| • Xylene                       | 1330-20-7 | Not Listed                       |
| • Zinc oxide                   | 1314-13-2 | Not Listed                       |
| • Zinc oxide as Zinc compounds |           | Not Listed                       |
| • Hexane                       | 110-54-3  | Not Listed                       |

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

|                                |           |   |
|--------------------------------|-----------|---|
| • Ethylbenzene                 | 100-41-4  | Not Listed                                  |
| • Toluene                      | 108-88-3  | developmental toxicity, initial date 1/1/91 |
| • Xylene                       | 1330-20-7 | Not Listed                                  |
| • Zinc oxide                   | 1314-13-2 | Not Listed                                  |
| • Zinc oxide as Zinc compounds |           | Not Listed                                  |
| • Hexane                       | 110-54-3  | Not Listed                                  |

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

|                                |           |   |
|--------------------------------|-----------|---|
| • Ethylbenzene                 | 100-41-4  | Not Listed  |
| • Toluene                      | 108-88-3  | 7000 µg/day MADL (level represents absorbed dose) |
| • Xylene                       | 1330-20-7 | Not Listed  |
| • Zinc oxide                   | 1314-13-2 | Not Listed  |
| • Zinc oxide as Zinc compounds |           | Not Listed  |
| • Hexane                       | 110-54-3  | Not Listed  |

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

|                                |           |   |
|--------------------------------|-----------|---|
| • Ethylbenzene                 | 100-41-4  | 54 µg/day NSRL (inhalation);<br>41 µg/day NSRL (oral) |
| • Toluene                      | 108-88-3  | Not Listed  |
| • Xylene                       | 1330-20-7 | Not Listed  |
| • Zinc oxide                   | 1314-13-2 | Not Listed  |
| • Zinc oxide as Zinc compounds |           | Not Listed  |
| • Hexane                       | 110-54-3  | Not Listed  |

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

|                                |           |   |
|--------------------------------|-----------|---|
| • Ethylbenzene                 | 100-41-4  | Not Listed  |
| • Toluene                      | 108-88-3  | female reproductive toxicity, initial date 8/7/09 |
| • Xylene                       | 1330-20-7 | Not Listed  |
| • Zinc oxide                   | 1314-13-2 | Not Listed  |
| • Zinc oxide as Zinc compounds |           | Not Listed  |
| • Hexane                       | 110-54-3  | Not Listed  |

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



|                                |           |            |
|--------------------------------|-----------|------------|
| • Ethylbenzene                 | 100-41-4  | Not Listed |
| • Toluene                      | 108-88-3  | Not Listed |
| • Xylene                       | 1330-20-7 | Not Listed |
| • Zinc oxide                   | 1314-13-2 | Not Listed |
| • Zinc oxide as Zinc compounds |           | Not Listed |
| • Hexane                       | 110-54-3  | Not Listed |

## United States - Pennsylvania

### Labor

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

|                                |           |            |
|--------------------------------|-----------|------------|
| • Ethylbenzene                 | 100-41-4  |            |
| • Toluene                      | 108-88-3  |            |
| • Xylene                       | 1330-20-7 |            |
| • Zinc oxide                   | 1314-13-2 | (fume)     |
| • Zinc oxide as Zinc compounds |           |            |
| • Hexane                       | 110-54-3  | Not Listed |

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

|                                |           |            |
|--------------------------------|-----------|------------|
| • Ethylbenzene                 | 100-41-4  | Not Listed |
| • Toluene                      | 108-88-3  | Not Listed |
| • Xylene                       | 1330-20-7 | Not Listed |
| • Zinc oxide                   | 1314-13-2 | Not Listed |
| • Zinc oxide as Zinc compounds |           | Not Listed |
| • Hexane                       | 110-54-3  | Not Listed |

## 15.2 Chemical Safety Assessment

- No Chemical Safety Assessment has been carried out.

## 15.3 Other Information

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

## Section 16 - Other Information

### Relevant Phrases (code & full text)

- H226 - Flammable liquid and vapour
- H312 - Harmful in contact with skin
- H332 - Harmful if inhaled
- H361f - Suspected of damaging fertility.
- H361d - Suspected of damaging the unborn child.
- H400 - Very toxic to aquatic life
- R10 - Flammable.
- R20 - Harmful by inhalation.
- R20/21 - Harmful by inhalation and in contact with skin.
- R50 - Very toxic to aquatic organisms.
- R62 - Possible risk of impaired fertility.

### Revision Date

- 01/March/2018

### Preparation Date

- 17/July/2013

### Other Information

- Changes to this revision: Updated mailing address.

### Disclaimer/Statement of Liability

- The information contained herein is based on data considered accurate which has been obtained from other companies and organizations. However, no warranty or representation is expressed or implied that the information, is accurate, complete or representative. Firestone Building Products Company, LLC assumes no responsibility

for injury to the buyer, the buyer's employees, or any third persons, if reasonable safety procedures are not followed. Additionally, Firestone Building Products Company assumes no responsibility for injury to buyer, the buyer's employees, or any third persons caused by abnormal use of this material, even if reasonable safety procedures are followed.

**Key to abbreviations**

NDA = No data available