

# SAFETY DATA SHEET

PLgel in ethylbenzene - less than 10 ml

## Section 1. Identification

This product is considered an article. This Safety Data Sheet is written based on the encapsulated substance or mixture in this article.

### 1.1 Product identifier

**Product name** : PLgel in ethylbenzene - less than 10 ml

**Part no.** : PL1110-1120, PL1110-1120DW, PL1110-1220, PL1110-1220DW, PL1110-1320, PL1110-1400, PL1110-1520, PL1110-6100, PL1110-6100DW, PL1110-6100LS, PL1110-6115, PL1110-6120, PL1110-6125, PL1110-6130, PL1110-6140, PL1110-6150, PL1110-6160, PL1110-6200, PL1110-6200LS, PL1110-6300, PL1110-6320, PL1110-6400, PL1110-6500, PL1110-6500DW, PL1110-6504, PL1110-6515, PL1110-6520, PL1110-6525, PL1110-6530, PL1110-6540, PL1110-6550, PL1210-1120, PL1510-1100, PL1510-1200, PL1510-1300, PL1510-1500, PL1510-1504, PL1510-1520, PL1510-3515, PL1510-5100, PL1510-5200, PL1510-5300, PL1510-5320, PL1510-5500, PL1510-5504, PL2010-0700, PL1113-1300, PL1113-1320, PL1113-1325, PL1113-1500, PL1113-6300, PL1113-6325, PL1113-6500, PL1113-6520, PL1513-1300, PL1513-1320, PL1513-1500, PL1513-5300, PL1513-5325, PL1513-5500, PL1513-5520, PL1913-5300, PL1913-5325, PL1913-5500, PL1913-5520, PL1010-2504, PL1013-2100, PL1110-6260, PL1510-5520, PL1510-5525, PL1510-5530, PL1510-5540

**Validation date** : 9/10/2018

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

**Material uses** :  Reagents and Standards for Analytical Chemistry Laboratory Use chromatography column  
Solvent volume: < 10 mL

|               |  |
|---------------|--|
| PL1110-1120   | PLgel 10um Guard 50 x 7.5 mm             |
| PL1110-1120DW | PLgel 10um Guard 50 x 7.7 mm             |
| PL1110-1220   | PLgel 20um Guard 50 x 7.5 mm             |
| PL1110-1220DW | PLgel 20um Guard 50 x 7.7 mm compression |
| PL1110-1320   | PLgel 3um Guard 50 x 7.5 mm              |
| PL1110-1400   | PLgel Olexis Guard 50 x 7.5 mm           |
| PL1110-1520   | PLgel 5um Guard 50 x 7.5 mm              |
| PL1110-6100   | PLgel 10um MIXED-B 300 x 7.5 mm          |
| PL1110-6100DW | PLgel 10um MIXED-B 300 x 7.5 mm          |
| PL1110-6100LS | PLgel 10um MIXED-B LS 300 x 7.5 mm       |
| PL1110-6115   | PLgel 10um 50A 300 x 7.5 mm              |
| PL1110-6120   | PLgel 10um 100A 300 x 7.5 mm             |
| PL1110-6125   | PLgel 10um 500A 300 x 7.5 mm             |
| PL1110-6130   | PLgel 10um 10E3A 300 x 7.5 mm            |
| PL1110-6140   | PLgel 10um 10E4A 300 x 7.5 mm            |
| PL1110-6150   | PLgel 10um 10E5A 300 x 7.5 mm            |
| PL1110-6160   | PLgel 10um 10E6A 300 x 7.5 mm            |
| PL1110-6200   | PLgel 20um MIXED-A 300 x 7.5 mm          |
| PL1110-6200LS | PLgel 20um MIXED-A LS 300 x 7.5 mm       |
| PL1110-6300   | PLgel 3um MIXED-E 300 x 7.5 mm           |
| PL1110-6320   | PLgel 3um 100A 300 x 7.5 mm              |
| PL1110-6400   | PLgel Olexis 300 x 7.5 mm                |
| PL1110-6500   | PLgel 5um MIXED-C 300 x 7.5 mm           |
| PL1110-6500DW | PLgel 5um MIXED-C 300 x 7.5 mm           |
| PL1110-6504   | PLgel 5um MIXED-D 300 x 7.5 mm           |
| PL1110-6515   | PLgel 5um 50A 300 x 7.5 mm               |
| PL1110-6520   | PLgel 5um 100A 300 x 7.5 mm              |
| PL1110-6525   | PLgel 5um 500A 300 x 7.5 mm              |
| PL1110-6530   | PLgel 5um 10E3A 300 x 7.5 mm             |
| PL1110-6540   | PLgel 5um 10E4A 300 x 7.5 mm             |
| PL1110-6550   | PLgel 5um 10E5A 300 x 7.5 mm             |
| PL1210-1120   | PLgel Prep Guard 25 x 25 mm              |

## Section 1. Identification

|             |  |
|-------------|--|
| PL1510-1100 | PLgel 10um MiniMIX-B Guard 50 x 4.6 mm             |
| PL1510-1200 | PLgel 20um MimiMIX-A Guard 50 x 4.6 mm             |
| PL1510-1300 | PLgel 3um MiniMIX-E Guard 50 x 4.6 mm              |
| PL1510-1500 | PLgel 5um MiniMIX-C Guard 50 x 4.6 mm              |
| PL1510-1504 | PLgel 5um MiniMIX-D Guard 50 x 4.6 mm              |
| PL1510-1520 | PLgel 5um Guard 50 x 4.6 mm                        |
| PL1510-3515 | PLgel 5um 50A, 150 x 4.6 mm                        |
| PL1510-5100 | PLgel 10um MiniMIX-B 250 x 4.6 mm                  |
| PL1510-5200 | PLgel 20um MiniMIX-A 250 x 4.6 mm                  |
| PL1510-5300 | PLgel 3um MiniMIX-E 250 x 4.6 mm                   |
| PL1510-5320 | PLgel 3um 100A 250 x 4.6 mm                        |
| PL1510-5500 | PLgel 5um MiniMIX-C 250 x 4.6 mm                   |
| PL1510-5504 | PLgel 5um MiniMIX-D 250 x 4. mm                    |
| PL2010-0700 | Contains:PL1110-6500 PLgel 5um MIXED-C 300 x 7.5mm |
| PL1113-1300 | ResiPore Guard 50 x 7.5 mm                         |
| PL1113-1320 | OligoPore Guard 50 x 7.5 mm                        |
| PL1113-1325 | MesoPore Guard 50 x 7.5 mm                         |
| PL1113-1500 | PolyPore Guard 50 x 7.5 mm                         |
| PL1113-6300 | ResiPore 300 x 7.5 mm                              |
| PL1113-6325 | MesoPore 300 x 7.5 mm                              |
| PL1113-6500 | PolyPore 300 x 7.5 mm                              |
| PL1113-6520 | OligoPore 300 x 7.5 mm                             |
| PL1513-1300 | ResiPore Guard 50 x 4.6 mm                         |
| PL1513-1320 | OligoPore Guard 50 x 4.6 mm                        |
| PL1513-1500 | PolyPore Guard 50 x 4.6 mm                         |
| PL1513-5300 | ResiPore 250 x 4.6 mm                              |
| PL1513-5325 | MesoPore 250 x 4.6 mm                              |
| PL1513-5500 | PolyPore 250 x 4.6 mm                              |
| PL1513-5520 | OligoPore 250 x 4.6 mm                             |
| PL1913-5300 | ResiPore 2.1 x 250 mm                              |
| PL1913-5325 | MesoPore 2.1 x 250 mm                              |
| PL1913-5500 | PolyPore 2.1 x 250 mm                              |
| PL1913-5520 | OligoPore 2.1 x 250 mm                             |
| PL1010-2504 | PLgel 5 µm MIXED-D, 100 x 10 mm                    |
| PL1013-2100 | PL Rapide H 100 x 10 mm                            |
| PL1110-6260 | PLgel 20 µm 10 <sup>6</sup> Å, 300 x 7.5 mm        |
| PL1510-5520 | PLgel 5um 100A 250 x 4.6 mm                        |
| PL1510-5525 | PLgel 5um 500A 250 x 4.6 mm                        |
| PL1510-5530 | PLgel 5um 10E3A 250 x 4.6 mm                       |
| PL1510-5540 | PLgel 5um 10E4A 250 x 4.6 mm                       |

### [1.3 Details of the supplier of the safety data sheet](#)

**Supplier/Manufacturer** : Agilent Technologies, Inc.  
5301 Stevens Creek Blvd  
Santa Clara, CA 95051, USA  
800-227-9770

### [1.4 Emergency telephone number](#)

**In case of emergency** : CHEMTREC®: 1-800-424-9300

## Section 2. Hazards identification

This article, when used under reasonable conditions and in accordance with the directions for use, should not present a health hazard. The substance or mixture is encapsulated in the article. Only if released due to use or processing of the article in a manner not in accordance with the product's directions for use it may present potential health and safety hazards.

### [2.1 Classification of the substance or mixture](#)

## Section 2. Hazards identification

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

### Classification of the substance or mixture

H225 FLAMMABLE LIQUIDS - Category 2  
 H319 EYE IRRITATION - Category 2A  
 H351 CARCINOGENICITY - Category 2  
 H335 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3  
 H336 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3  
 H373 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (hearing organs) - Category 2  
 H304 ASPIRATION HAZARD - Category 1  
 H401 AQUATIC HAZARD (ACUTE) - Category 2

**Ingredients of unknown toxicity** : Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: > 60%

### 2.2 GHS label elements

#### **Hazard pictograms**



#### **Signal word**

: Danger

#### **Hazard statements**

: H225 - Highly flammable liquid and vapor.  
 H319 - Causes serious eye irritation.  
 H351 - Suspected of causing cancer.  
 H304 - May be fatal if swallowed and enters airways.  
 H335 - May cause respiratory irritation.  
 H336 - May cause drowsiness or dizziness.  
 H373 - May cause damage to organs through prolonged or repeated exposure. (hearing organs)  
 H401 - Toxic to aquatic life.

### Precautionary statements

#### **Prevention**

: P201 - Obtain special instructions before use.  
 P202 - Do not handle until all safety precautions have been read and understood.  
 P280 - Wear protective gloves. Wear eye or face protection. Wear protective clothing.  
 P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 P241 - Use explosion-proof electrical, ventilating, lighting and all material-handling equipment.  
 P242 - Use only non-sparking tools.  
 P243 - Take precautionary measures against static discharge.  
 P233 - Keep container tightly closed.  
 P271 - Use only outdoors or in a well-ventilated area.  
 P273 - Avoid release to the environment.  
 P260 - Do not breathe vapor.  
 P264 - Wash hands thoroughly after handling.

## Section 2. Hazards identification

- Response** : P314 - Get medical attention if you feel unwell.  
 P308 + P313 - IF exposed or concerned: Get medical attention.  
 P304 + P340 + P312 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.  
 P301 + P310 + P331 - IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting.  
 P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.  
 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 attention.
- Storage** : P405 - Store locked up.  
 P403 - Store in a well-ventilated place.  
 P235 - Keep cool.
- Disposal** : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

### 2.3 Other hazards

- Hazards not otherwise classified** : None known.

## Section 3. Composition/information on ingredients

This article, when used under reasonable conditions and in accordance with the directions for use, should not present a health hazard. The substance or mixture is encapsulated in the article. Only if released due to use or processing of the article in a manner not in accordance with the product's directions for use it may present potential health and safety hazards.

- Substance/mixture** : Mixture (encapsulated in article)

| Ingredient name | %         | CAS number |
|-----------------|-----------|------------|
| ethylbenzene    | ≥50 - ≤75 | 100-41-4   |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.**

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### 4.1 Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

## Section 4. First aid measures

- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

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

#### Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.
- Skin contact** :  No known significant effects or critical hazards.
- Ingestion** : Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

#### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness
- Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing  
nausea or vomiting  
headache  
drowsiness/fatigue  
dizziness/vertigo  
unconsciousness
- Skin contact** :  No specific data.
- Ingestion** : Adverse symptoms may include the following:  
nausea or vomiting

### 4.3 Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### 5.1 Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

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

- Specific hazards arising from the chemical** : Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is toxic to aquatic life. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide

### 5.3 Advice for firefighters

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

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

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

### 6.2 Environmental precautions

- : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

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

- Methods for cleaning up** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

## Section 7. Handling and storage

### 7.1 Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not swallow. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

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

- Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

### 7.3 Specific end use(s)

- Recommendations** : Industrial applications, Professional applications.
- Industrial sector specific solutions** : Not applicable.

## Section 8. Exposure controls/personal protection

Since the hazardous ingredient in this article is encapsulated, the risk of exposure by inhalation, ingestion, skin contact and eyes contact is minimum.

### 8.1 Control parameters

#### Occupational exposure limits

| Ingredient name | Exposure limits   |
|-----------------|---|
| ethylbenzene    | <p><b>ACGIH TLV (United States, 3/2017).</b><br/>TWA: 20 ppm 8 hours.</p> <p><b>OSHA PEL 1989 (United States, 3/1989).</b><br/>TWA: 100 ppm 8 hours.<br/>TWA: 435 mg/m<sup>3</sup> 8 hours.<br/>STEL: 125 ppm 15 minutes.<br/>STEL: 545 mg/m<sup>3</sup> 15 minutes.</p> <p><b>NIOSH REL (United States, 10/2016).</b><br/>TWA: 100 ppm 10 hours.<br/>TWA: 435 mg/m<sup>3</sup> 10 hours.<br/>STEL: 125 ppm 15 minutes.<br/>STEL: 545 mg/m<sup>3</sup> 15 minutes.</p> <p><b>OSHA PEL (United States, 6/2016).</b><br/>TWA: 100 ppm 8 hours.<br/>TWA: 435 mg/m<sup>3</sup> 8 hours.</p> |

## Section 8. Exposure controls/personal protection

### 8.2 Exposure controls

**Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

### Skin protection

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

**Physical state** : Solid. (containing flammable liquid)  
**Color** : White.  
**Odor** : Aromatic.  
**Odor threshold** : Not available.  
**pH** : Not available.



## Section 9. Physical and chemical properties

|   |  |
|---|--|
| <b>Melting point</b>                                | : -95°C (-139°F)   |
| <b>Boiling point</b>                                | : 136°C (276.8°F)  |
| <b>Flash point</b>                                  | : Closed cup: 21°C (69.8°F)  |
| <b>Evaporation rate</b>                             | : Not available.   |
| <b>Flammability (solid, gas)</b>                    | : Contains: Flammable liquid   |
| <b>Lower and upper explosive (flammable) limits</b> | : Lower: 0.8%<br>Upper: 6.7%   |
| <b>Vapor pressure</b>                               | : Not available.   |
| <b>Vapor density</b>                                | : Not available.   |
| <b>Relative density</b>                             | : 0.9  |
| <b>Density</b>                                      | : 0.9 g/cm <sup>3</sup> [20°C (68°F)]  |
| <b>Solubility</b>                                   | : <input checked="" type="checkbox"/> Mobile phase: Very slightly soluble in the following materials: water<br>Stationary phase: Insoluble |
| <b>Partition coefficient: n-octanol/water</b>       | : Not available.   |
| <b>Auto-ignition temperature</b>                    | : 432.22°C (810°F)   |
| <b>Decomposition temperature</b>                    | : Not available.   |
| <b>Viscosity</b>                                    | : Not available.   |

## Section 10. Stability and reactivity

|  |   |
|--|---|
| <b>10.1 Reactivity</b>                         | : No specific test data related to reactivity available for this product or its ingredients.  |
| <b>10.2 Chemical stability</b>                 | : The product is stable.  |
| <b>10.3 Possibility of hazardous reactions</b> | : Under normal conditions of storage and use, hazardous reactions will not occur.   |
| <b>10.4 Conditions to avoid</b>                | : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. |
| <b>10.5 Incompatible materials</b>             | : Reactive or incompatible with the following materials:<br>oxidizing materials   |
| <b>10.6 Hazardous decomposition products</b>   | : Under normal conditions of storage and use, hazardous decomposition products should not be produced.  |

## Section 11. Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

| Product/ingredient name                          | Result                   | Species       | Dose                      | Exposure |
|--|--------------------------|---------------|---------------------------|----------|
| <input checked="" type="checkbox"/> ethylbenzene | LD50 Dermal<br>LD50 Oral | Rabbit<br>Rat | >5000 mg/kg<br>3500 mg/kg | -<br>-   |

#### Irritation/Corrosion

## Section 11. Toxicological information

| Product/ingredient name | Result                 | Species | Score | Exposure               | Observation |
|-------------------------|------------------------|---------|-------|------------------------|-------------|
| ethylbenzene            | Eyes - Severe irritant | Rabbit  | -     | 500 milligrams         | -           |
|                         | Skin - Mild irritant   | Rabbit  | -     | 24 hours 15 milligrams | -           |

### Conclusion/Summary

**Skin** : Repeated exposure may cause skin dryness or cracking.

### Sensitization

Not available.

### Mutagenicity

**Conclusion/Summary** : Not available.

### Carcinogenicity

**Conclusion/Summary** : Not available.

### Classification

| Product/ingredient name | OSHA | IARC | NTP |
|-------------------------|------|------|-----|
| ethylbenzene            | -    | 2B   | -   |

### Reproductive toxicity

**Conclusion/Summary** : Not available.

### Teratogenicity

**Conclusion/Summary** : Not available.

### Specific target organ toxicity (single exposure)

| Name         | Category   | Route of exposure | Target organs                                     |
|--------------|------------|-------------------|---|
| ethylbenzene | Category 3 | Not applicable.   | Respiratory tract irritation and Narcotic effects |

### Specific target organ toxicity (repeated exposure)

| Name         | Category   | Route of exposure | Target organs  |
|--------------|------------|-------------------|----------------|
| ethylbenzene | Category 2 | Not determined    | hearing organs |

### Aspiration hazard

| Name  | Result   |
|---|--|
| PLgel in ethylbenzene - less than 10 ml<br>ethylbenzene | ASPIRATION HAZARD - Category 1<br>ASPIRATION HAZARD - Category 1 |

**Information on the likely routes of exposure** : Routes of entry anticipated: Oral, Dermal, Inhalation.

### Potential acute health effects

**Eye contact** : Causes serious eye irritation.

**Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.

**Skin contact** : No known significant effects or critical hazards.

**Ingestion** : Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

## Section 11. Toxicological information

### Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:  
 pain or irritation  
 watering  
 redness
- Inhalation** : Adverse symptoms may include the following:  
 respiratory tract irritation  
 coughing  
 nausea or vomiting  
 headache  
 drowsiness/fatigue  
 dizziness/vertigo  
 unconsciousness
- Skin contact** :  No specific data.
- Ingestion** : Adverse symptoms may include the following:  
 nausea or vomiting

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

#### Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

#### Potential chronic health effects

- General** :  May cause damage to organs through prolonged or repeated exposure.
- Carcinogenicity** : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : No known significant effects or critical hazards.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

| Route                                    | ATE value    |
|--|--------------|
| <input checked="" type="checkbox"/> Oral | 5555.6 mg/kg |

## Section 12. Ecological information

### 12.1 Toxicity

## Section 12. Ecological information

| Product/ingredient name | Result                           | Species                                 | Exposure |
|-------------------------|----------------------------------|---|----------|
| ethylbenzene            | Acute EC50 4600 µg/l Fresh water | Algae - Pseudokirchneriella subcapitata | 72 hours |
|                         | Acute EC50 3600 µg/l Fresh water | Algae - Pseudokirchneriella subcapitata | 96 hours |
|                         | Acute EC50 6530 µg/l Fresh water | Crustaceans - Artemia sp. - Nauplii     | 48 hours |
|                         | Acute EC50 2930 µg/l Fresh water | Daphnia - Daphnia magna - Neonate       | 48 hours |
|                         | Acute LC50 4200 µg/l Fresh water | Fish - Oncorhynchus mykiss              | 96 hours |

### 12.2 Persistence and degradability

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|-------------------------|-------------------|------------|------------------|
| ethylbenzene            | -                 | -          | Readily          |

### 12.3 Bioaccumulative potential

| Product/ingredient name | LogP <sub>ow</sub> | BCF | Potential |
|-------------------------|--------------------|-----|-----------|
| ethylbenzene            | 3.6                | -   | low       |

### 12.4 Mobility in soil

Soil/water partition coefficient (K<sub>oc</sub>) : Not available.

12.5 Other adverse effects : No known significant effects or critical hazards.

## Section 13. Disposal considerations

### 13.1 Waste treatment methods

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

## Section 14. Transport information

This Safety Data Sheet is written based on the encapsulated substance or mixture in this article. Since the hazardous ingredient is encapsulated, the risk of exposure by inhalation, ingestion, skin contact and eyes contact is minimum.

**DOT / TDG / Mexico / IMDG /** : Not regulated.

**IATA**

### Additional information

**Remarks** : Special provisions

DOT: 47

TDG: 56

MX: 216

IATA: A46

IMDG: 216

**DOT Classification** : **Reportable quantity** 1587.3 lbs / 720.63 kg [211.52 gal / 800.71 L]. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to Annex II of MARPOL and the IBC Code** : Not available.

## Section 15. Regulatory information

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

**U.S. Federal regulations** : **TSCA 8(a) CDR Exempt/Partial exemption:** Not determined  
**Clean Water Act (CWA) 307:** ethylbenzene  
**Clean Water Act (CWA) 311:** ethylbenzene

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Listed

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

### SARA 302/304

#### Composition/information on ingredients

No products were found.

**SARA 304 RQ** : Not applicable.

### SARA 311/312

## Section 15. Regulatory information

**Classification** : **FLAMMABLE LIQUIDS - Category 2**  
**EYE IRRITATION - Category 2A**  
**CARCINOGENICITY - Category 2**  
**SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3**  
**SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3**  
**SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (hearing organs) - Category 2**  
**ASPIRATION HAZARD - Category 1**

### Composition/information on ingredients

| Name         | %         | Classification  |
|--------------|-----------|---|
| ethylbenzene | ≥50 - ≤75 | FLAMMABLE LIQUIDS - Category 2<br>EYE IRRITATION - Category 2A<br>CARCINOGENICITY - Category 2<br>SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3<br>SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3<br>SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (hearing organs) - Category 2<br>ASPIRATION HAZARD - Category 1<br>HNOC - Defatting irritant |

### SARA 313

|  | Product name | CAS number | %         |
|--|--------------|------------|-----------|
| <b>Form R - Reporting requirements</b> | ethylbenzene | 100-41-4   | ≥50 - ≤75 |
| <b>Supplier notification</b>           | ethylbenzene | 100-41-4   | ≥50 - ≤75 |

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

### State regulations

**Massachusetts** : The following components are listed: ETHYL BENZENE; ETHYLBENZENE  
**New York** : The following components are listed: Ethylbenzene  
**New Jersey** : The following components are listed: ETHYL BENZENE; BENZENE, ETHYL-  
**Pennsylvania** : The following components are listed: BENZENE, ETHYL-

### California Prop. 65

**WARNING:** This product can expose you to Ethylbenzene, which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

| Ingredient name | No significant risk level | Maximum acceptable dosage level |
|-----------------|---------------------------|---------------------------------|
| ethylbenzene    | Yes.                      | -                               |

### International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### Montreal Protocol (Annexes A, B, C, E)

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

## Section 15. Regulatory information

### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

### Inventory list

|                          |  |
|--------------------------|--|
| <b>Australia</b>         | : All components are listed or exempted.   |
| <b>Canada</b>            | : All components are listed or exempted.   |
| <b>China</b>             | : All components are listed or exempted.   |
| <b>Europe</b>            | : All components are listed or exempted.   |
| <b>Japan</b>             | : <b>Japan inventory (ENCS)</b> : All components are listed or exempted.<br><b>Japan inventory (ISHL)</b> : All components are listed or exempted. |
| <b>Malaysia</b>          | : All components are listed or exempted.   |
| <b>New Zealand</b>       | : All components are listed or exempted.   |
| <b>Philippines</b>       | : All components are listed or exempted.   |
| <b>Republic of Korea</b> | : All components are listed or exempted.   |
| <b>Taiwan</b>            | : All components are listed or exempted.   |
| <b>Thailand</b>          | : <input checked="" type="checkbox"/> Not determined.  |
| <b>Turkey</b>            | : <input checked="" type="checkbox"/> All components are listed or exempted.   |
| <b>United States</b>     | : All components are listed or exempted.   |
| <b>Viet Nam</b>          | : <input checked="" type="checkbox"/> Not determined.  |

## Section 16. Other information

### History

|                               |              |
|-------------------------------|--------------|
| <b>Date of issue</b>          | : 09/10/2018 |
| <b>Date of previous issue</b> | : 11/16/2016 |
| <b>Version</b>                | : 3          |

### Procedure used to derive the classification

| Classification   | Justification         |
|--|-----------------------|
| <input checked="" type="checkbox"/> FLAMMABLE LIQUIDS - Category 2                           | On basis of test data |
| EYE IRRITATION - Category 2A   | Calculation method    |
| CARCINOGENICITY - Category 2   | Calculation method    |
| SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 | Calculation method    |
| SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3             | Calculation method    |
| SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (hearing organs) - Category 2             | Calculation method    |
| ASPIRATION HAZARD - Category 1   | Expert judgment       |
| AQUATIC HAZARD (ACUTE) - Category 2  | Calculation method    |

Indicates information that has changed from previously issued version.

### Notice to reader

**Disclaimer:** The information contained in this document is based on Agilent's state of knowledge at the time of preparation. No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.