## SECTION 1: Identification

### 1.1. Identification

<table>
<thead>
<tr>
<th>Product name</th>
<th>Gelest® UtenSil™ Primer P1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product code</td>
<td>PP1-USP1</td>
</tr>
<tr>
<td>Product form</td>
<td>Mixture</td>
</tr>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Formula</td>
<td>C6H14O3Si</td>
</tr>
<tr>
<td>Synonyms</td>
<td>ALLYLTRIMETHOXYSILANE in heptane; UtenSil™ Primer P1</td>
</tr>
<tr>
<td>Chemical family</td>
<td>ORGANOMETHOXYSILANE/HYDROCARBON BLEND</td>
</tr>
</tbody>
</table>

### 1.2. Recommended use and restrictions on use

**Recommended use**: Chemical intermediate

### 1.3. Supplier

**GELEST, INC.**

11 East Steel Road

Morrisville, PA 19067

USA

T 215-547-1015 - F 215-547-2484 - (M-F): 8:00 AM - 5:30 PM EST

info@gelest.com - www.gelest.com

### 1.4. Emergency telephone number

**Emergency number**: CHEMTREC: 1-800-424-9300 (USA); +1 703-527-3887 (International)

## SECTION 2: Hazard(s) identification

### 2.1. Classification of the substance or mixture

**GHS-US classification**

- Flammable liquids Category 2: H225 - Highly flammable liquid and vapor
- Skin corrosion/irritation Category 2: H315 - Causes skin irritation
- Specific target organ toxicity (single exposure) Category 3: H336 - May cause drowsiness or dizziness
- Aspiration hazard Category 1: H304 - May be fatal if swallowed and enters airways
- Hazardous to the aquatic environment - Acute Hazard Category 1: H400 - Very toxic to aquatic life
- Hazardous to the aquatic environment - Chronic Hazard Category 1: H410 - Very toxic to aquatic life with long lasting effects

Full text of H statements: see section 16

### 2.2. GHS Label elements, including precautionary statements

**GHS US labeling**

**Hazard pictograms (GHS US)**: 

- Flame
- Exclamation mark
- Person with line through
- Exclamation mark

**Signal word (GHS US)**: Danger

**Hazard statements (GHS US)**:

- H225 - Highly flammable liquid and vapor
- H304 - May be fatal if swallowed and enters airways
- H315 - Causes skin irritation
- H336 - May cause drowsiness or dizziness
- H400 - Very toxic to aquatic life
- H410 - Very toxic to aquatic life with long lasting effects

**Precautionary statements (GHS US)**:

- P280 - Wear protective gloves/protective clothing/eye protection/face protection.
- P312 - Call a POISON CENTER if you feel unwell
- P210 - Keep away from heat, open flames, sparks. - No smoking.
- P240 - Ground/Bond container and receiving equipment
- P241 - Use explosion-proof electrical equipment
- P242 - Use only non-sparking tools.
- P243 - Take precautionary measures against static discharge.
- P261 - Avoid breathing vapors.
- P264 - Wash hands thoroughly after handling.
- P271 - Use only outdoors or in a well-ventilated area.
- P273 - Avoid release to the environment.
- P301+P310 - If swallowed: Immediately call a POISON CENTER
- P303+P361+P353 - If on skin (or hair): take off immediately all contaminated clothing. rinse skin with water/shower
- P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing
P321 - Specific treatment (see first aid instructions on this label)
P331 - Do NOT induce vomiting.
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P370+P378 - In case of fire: Use water spray, foam, carbon dioxide, dry chemical to extinguish.
P391 - Collect spillage.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P403+P235 - Keep in a cool place.
P405 - Store locked up.
P501 - Dispose of contents/container to licensed waste disposal facility.

2.3. Hazards not otherwise classified (HNOC)
No additional information available

2.4. Unknown acute toxicity (GHS US)
Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances
Not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
</table>
| n-Heptane                   | (CAS No.) 142-82-5 | > 90 | Flam. Liq. 2, H225  
Skin Irrit. 2, H315  
STOT SE 3, H336  
Asp. Tox. 1, H304  
Aquatic Acute 1, H400  
Aquatic Chronic 1, H410 |
| Allyltrimethoxysilane       | (CAS No.) 2551-83-9 | < 10 | Flam. Liq. 3, H226  
Eye Irrit. 2A, H319 |

Full text of hazard classes and H-statements: see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general: Remove contaminated clothing and shoes. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). If possible show this sheet; if not available show packaging or label.

First-aid measures after inhalation: Remove person to fresh air and keep comfortable for breathing. If you feel unwell, seek medical advice.

First-aid measures after skin contact: Wash with plenty of soap and water. Get medical advice/attention.

First-aid measures after eye contact: Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.

First-aid measures after ingestion: Never give anything by mouth to an unconscious person. Immediately call a poison center or doctor/physician.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation: May cause drowsiness or dizziness. May cause irritation to the respiratory tract. Heptane can cause vertigo, incoordination and stupor at 5000 ppm. Vapor inhalation of heptane may lead to impairment of coordination mental alertness, and reaction times, leading to accident proneness.

Symptoms/effects after skin contact: Causes skin irritation.

Symptoms/effects after eye contact: May cause eye irritation.

Symptoms/effects after ingestion: May be fatal if swallowed and enters airways.

Chronic symptoms: On contact with water this compound liberates methanol which is known to have a chronic effect on the central nervous system. Methanol may affect the central nervous system resulting in persistent or recurring headaches or impaired vision.

4.3. Immediate medical attention and special treatment, if necessary

NOTE TO PHYSICIAN: This product reacts with water in the acid contents of the stomach to form methanol. The combination of visual disturbances, metabolic acidosis and formic acid in urine is evidence of methanol poisoning. The therapeutic intravenous administration of ethanol (10 ml/hour) allows methanol to be preferentially oxidized and reduces production of methanol metabolites. Acidosis must be treated with intravenous administration of sodium bicarbonate and methanol elimination may be increased by hemodialysis, as indicated. Treatment should be based on blood methanol levels and acid-base balance.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media


Unsuitable extinguishing media: Do not use straight streams.
5.2. Specific hazards arising from the chemical
Fire hazard: Highly flammable liquid and vapor. Irritating fumes and organic acid vapors may develop when material is exposed to elevated temperatures or open flame.
Explosion hazard: May form flammable/explosive vapor-air mixture.

5.3. Special protective equipment and precautions for fire-fighters
Firefighting instructions: Exercise caution when fighting any chemical fire. Use water spray to cool exposed surfaces.
Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection. Avoid all eye and skin contact and do not breathe vapor and mist.

SECTION 6: Accidental release measures
6.1. Personal precautions, protective equipment and emergency procedures
General measures: Eliminate every possible source of ignition. Use special care to avoid static electric charges.
6.1.1. For non-emergency personnel
Protective equipment: Wear protective equipment as described in Section 8.
Emergency procedures: Evacuate unnecessary personnel.
6.1.2. For emergency responders
Protective equipment: Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions
Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up
For containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
Methods for cleaning up: Clean up any spills as soon as possible, using an absorbent material to collect it. Sweep or shovel spills into appropriate container for disposal. Use only non-sparking tools.

6.4. Reference to other sections
See Heading 8, Exposure controls and personal protection.

SECTION 7: Handling and storage
7.1. Precautions for safe handling
Additional hazards when processed: Handle empty containers with care because residual vapors are flammable. Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Precautions for safe handling: Avoid all eye and skin contact and do not breathe vapor and mist. Ground/bond container and receiving equipment. Take precautionary measures against static discharge. Use only outdoors or in a well-ventilated area. Use only non-sparking tools.
Hygiene measures: Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities
Technical measures: Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof electrical equipment.
Storage conditions: Keep container tightly closed.
Storage area: Store in a well-ventilated place. Store away from heat.

SECTION 8: Exposure controls/personal protection
8.1. Control parameters

<table>
<thead>
<tr>
<th>n-Heptane (142-82-5)</th>
<th>ACGIH TWA (ppm)</th>
<th>400 ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH</td>
<td>ACGIH STEL (ppm)</td>
<td>500 ppm</td>
</tr>
<tr>
<td>OSHA</td>
<td>OSHA PEL (TWA) (mg/m³)</td>
<td>2000 mg/m³</td>
</tr>
<tr>
<td>OSHA</td>
<td>OSHA PEL (TWA) (ppm)</td>
<td>500 ppm</td>
</tr>
<tr>
<td>IDLH</td>
<td>US IDLH (ppm)</td>
<td>750 ppm</td>
</tr>
<tr>
<td>NIOSH</td>
<td>NIOSH REL (TWA) (mg/m³)</td>
<td>350 mg/m³</td>
</tr>
<tr>
<td>NIOSH</td>
<td>NIOSH REL (TWA) (ppm)</td>
<td>85 ppm</td>
</tr>
<tr>
<td>NIOSH</td>
<td>NIOSH REL (ceiling) (mg/m³)</td>
<td>1800 mg/m³</td>
</tr>
</tbody>
</table>
Gelest® UtenSil™ Primer P1
Safety Data Sheet

<table>
<thead>
<tr>
<th>n-Heptane (142-82-5)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NIOSH</td>
<td>NIOSH REL (ceiling) (ppm)</td>
</tr>
</tbody>
</table>

8.2. Appropriate engineering controls
Appropriate engineering controls: Provide local exhaust or general room ventilation.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:
Avoid all unnecessary exposure. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Hand protection:
Neoprene or nitrile rubber gloves

Eye protection:
Chemical goggles. Contact lenses should not be worn

Skin and body protection:
Wear suitable protective clothing

Respiratory protection:
Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. NIOSH-certified organic vapor (black cartridge) respirator.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Clear liquid</td>
</tr>
<tr>
<td>Molecular mass</td>
<td>(mixture)</td>
</tr>
<tr>
<td>Color</td>
<td>Colorless</td>
</tr>
<tr>
<td>Odor</td>
<td>No data available</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>Refractive index</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate (butyl acetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>&lt; 0 °C</td>
</tr>
<tr>
<td>Boiling point</td>
<td>98 °C - initial (heptane)</td>
</tr>
<tr>
<td>Flash point</td>
<td>-4 °C</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>204 °C (heptane)</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Highly flammable liquid and vapor</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>40 mm Hg @ 22°C (heptane)</td>
</tr>
<tr>
<td>Relative vapor density at 20 °C</td>
<td>3.45 (heptane)</td>
</tr>
<tr>
<td>Relative density</td>
<td>0.7</td>
</tr>
<tr>
<td>% Volatiles</td>
<td>&gt; 95 %</td>
</tr>
<tr>
<td>Solubility</td>
<td>Insoluble in water</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Log Kow</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>1 - 2 cSt</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosion limits</td>
<td>1 - 6.7 vol % (lower; upper: heptane)</td>
</tr>
</tbody>
</table>

9.2. Other information
No additional information available
 SECTION 10: Stability and reactivity

10.1. Reactivity
No additional information available

10.2. Chemical stability
Stable in sealed containers.

10.3. Possibility of hazardous reactions
Reacts with water and moisture in air, liberating methanol.

10.4. Conditions to avoid
Heat. Sparks. Open flame.

10.5. Incompatible materials
Moisture. Water.

10.6. Hazardous decomposition products
Methanol. Organic acid vapors.

 SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity: Not classified

<table>
<thead>
<tr>
<th>n-Heptane (142-82-5)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral mouse</td>
<td>5000 mg/kg</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>3000 mg/kg</td>
</tr>
<tr>
<td>LC50 inhalation rat (mg/l)</td>
<td>103 g/m³ (Exposure time: 4 h)</td>
</tr>
<tr>
<td>ATE US (dermal)</td>
<td>3000 mg/kg body weight</td>
</tr>
<tr>
<td>ATE US (vapors)</td>
<td>103 mg/l/4h</td>
</tr>
<tr>
<td>ATE US (dust, mist)</td>
<td>103 mg/l/4h</td>
</tr>
<tr>
<td>Toxicity information</td>
<td>1000 ppm Inhalation (heptane)-human, TCLo</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation: Causes skin irritation.
Serious eye damage/irritation: Not classified
Respiratory or skin sensitization: Not classified
Germ cell mutagenicity: Not classified
Carcinogenicity: Not classified

Reproductive toxicity: Not classified
Specific target organ toxicity – single exposure: May cause drowsiness or dizziness.
Specific target organ toxicity – repeated exposure: Not classified

Aspiration hazard: May be fatal if swallowed and enters airways.
Symptoms/effects after inhalation: May cause drowsiness or dizziness. May cause irritation to the respiratory tract. Heptane can cause vertigo, incoordination and stupor at 5000ppm. Vapor inhalation of heptane may lead to impairment of coordination mental alertness, and reaction times, leading to accident proneness.

Symptoms/effects after skin contact: Causes skin irritation.
Symptoms/effects after eye contact: May cause eye irritation.
Symptoms/effects after ingestion: May be fatal if swallowed and enters airways.
Chronic symptoms: On contact with water this compound liberates methanol which is known to have a chronic effect on the central nervous system. Methanol may effect the central nervous system resulting in persistent or recurring headaches or impaired vision.

Reason for classification: Expert judgment

 SECTION 12: Ecological information

12.1. Toxicity
Ecology - general: Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

<table>
<thead>
<tr>
<th>n-Heptane (142-82-5)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fish 1</td>
<td>375 mg/l (Exposure time: 96 h - Species: Cichlid fish)</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability
No additional information available

12.3. Bioaccumulative potential
Gelest® UtenSil™ Primer P1
Safety Data Sheet

### Section 1: Identification
- **Product name:** n-Heptane (142-82-5)
- **Log Pow:** 4.66

### Section 2: Hazard Identification
- **Mobility in soil:** No additional information available
- **Other adverse effects:**
  - **Effect on the ozone layer:** No additional information available

### Section 3: First Aid Measures

### Section 4:fire-fighting Measures

### Section 5:Reactor Measures

### Section 6:Hazardous decomposition products

### Section 7: Handling and Storage

### Section 8:Exposure Controls/Educational measures

### Section 9:Personal protective equipment

### Section 10:Physical and chemical properties
- **Boiling point:** 187 °C (120 °C)
- **Concentration (mass/mass):**> 95%

### Section 11:Toxicological Information
- **R402-C:** Harmful to aquatic organisms.

### Section 12:Ecotoxicological Information

### Section 13:Disposal Considerations

#### Disposal methods
- **Sewage disposal recommendations:** Do not dispose of waste into sewer.
- **Product/Packaging disposal recommendations:** May be incinerated. Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to licensed waste disposal facility.
- **Ecology - waste materials:** Handle empty containers with care because residual vapors are flammable.
- **Avoid release to the environment.**

### Section 14:Transport Information

#### UN number
- **UN-Number (DOT):** 1139
- **DOT NA no.:** UN1139

#### UN proper shipping name
- **Transport document description:** UN1139 Coating solution (ALLYLTRIMETHOXYSILANE in heptane), 3, II
- **Proper Shipping Name (DOT):** Coating solution (ALLYLTRIMETHOXYSILANE in heptane)
- **Class (DOT):** 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
- **Packing group (DOT):** II - Medium Danger
- **Hazard labels (DOT):** 3 - Flammable liquid

#### Dangerous for the environment
- Yes

#### Marine pollutant
- Yes

#### DOT Packaging Non Bulk (49 CFR 173.xxx)
- 202

#### DOT Packaging Bulk (49 CFR 173.xxx)
- 242

#### DOT Packaging Exceptions (49 CFR 173.xxx)
- 150

#### Additional information
- **Emergency Response Guide (ERG) Number:** 127
- **Other information:** No supplementary information available.

#### Transport by sea
- **DOT Vessel Stowage Location:** B - (i) The material may be stowed “on deck” or “under deck” on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) “On deck only” on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.

#### Air transport
- **DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27):** 5 L
- **DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75):** 60 L
## SECTION 15: Regulatory information

### 15.1. US Federal regulations

<table>
<thead>
<tr>
<th>Substance</th>
<th>Inventory Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allytrimethoxysilane (2551-83-9)</td>
<td>Listed on the United States TSCA (Toxic Substances Control Act) inventory</td>
</tr>
<tr>
<td>n-Heptane (142-82-5)</td>
<td>Listed on the United States TSCA (Toxic Substances Control Act) inventory</td>
</tr>
</tbody>
</table>

**EPA TSCA Regulatory Flag**

T - T - indicates a substance that is the subject of a final TSCA section 4 test rule.

### 15.2. International regulations

#### CANADA

<table>
<thead>
<tr>
<th>Substance</th>
<th>Inventory Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allytrimethoxysilane (2551-83-9)</td>
<td>Listed on the Canadian DSL (Domestic Substances List)</td>
</tr>
<tr>
<td>n-Heptane (142-82-5)</td>
<td>Listed on the Canadian DSL (Domestic Substances List)</td>
</tr>
</tbody>
</table>

**WHMIS Classification**

Class B Division 2 - Flammable Liquid
Class D Division 2 Subdivision B - Toxic material causing other toxic effects

#### EU-Regulations

<table>
<thead>
<tr>
<th>Substance</th>
<th>Inventory Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allytrimethoxysilane (2551-83-9)</td>
<td>Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)</td>
</tr>
<tr>
<td>n-Heptane (142-82-5)</td>
<td>Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)</td>
</tr>
</tbody>
</table>

#### National regulations

<table>
<thead>
<tr>
<th>Substance</th>
<th>Inventory Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allytrimethoxysilane (2551-83-9)</td>
<td>Listed on the AICS (Australian Inventory of Chemical Substances)</td>
</tr>
<tr>
<td></td>
<td>Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)</td>
</tr>
<tr>
<td></td>
<td>Listed on the Japanese ENCS (Existing &amp; New Chemical Substances) inventory</td>
</tr>
<tr>
<td></td>
<td>Listed on NZIoC (New Zealand Inventory of Chemicals)</td>
</tr>
<tr>
<td></td>
<td>Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)</td>
</tr>
<tr>
<td>n-Heptane (142-82-5)</td>
<td>Listed on the AICS (Australian Inventory of Chemical Substances)</td>
</tr>
<tr>
<td></td>
<td>Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)</td>
</tr>
<tr>
<td></td>
<td>Listed on the Japanese ENCS (Existing &amp; New Chemical Substances) inventory</td>
</tr>
<tr>
<td></td>
<td>Listed on the Korean ECL (Existing Chemicals List)</td>
</tr>
<tr>
<td></td>
<td>Listed on NZIoC (New Zealand Inventory of Chemicals)</td>
</tr>
<tr>
<td></td>
<td>Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)</td>
</tr>
<tr>
<td></td>
<td>Listed on the Canadian IDL (Ingredient Disclosure List)</td>
</tr>
<tr>
<td></td>
<td>Listed on INSQ (Mexican National Inventory of Chemical Substances)</td>
</tr>
<tr>
<td></td>
<td>Listed on CICR (Turkish Inventory and Control of Chemicals)</td>
</tr>
</tbody>
</table>

### 15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

<table>
<thead>
<tr>
<th>Substance</th>
<th>List Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>n-Heptane (142-82-5)</td>
<td>U.S. - Massachusetts - Right To Know List</td>
</tr>
<tr>
<td></td>
<td>U.S. - New Jersey - Right to Know Hazardous Substance List</td>
</tr>
<tr>
<td></td>
<td>U.S. - Pennsylvania - RTK (Right to Know) List</td>
</tr>
</tbody>
</table>

## SECTION 16: Other information

Full text of H-phrases:

- H225: Highly flammable liquid and vapor
- H226: Flammable liquid and vapor
- H304: May be fatal if swallowed and enters airways
- H315: Causes skin irritation
- H319: Causes serious eye irritation
- H336: May cause drowsiness or dizziness
- H400: Very toxic to aquatic life
- H410: Very toxic to aquatic life with long lasting effects
### Abbreviations and acronyms

Abbreviations: ND: Not Determined, No Data; NA: Not Applicable; LD: Lethal Dose; LC: Lethal Concentration; ATE: Acute Toxicity Estimates; H: hour; °: °C unless otherwise stated; mm: millimeters Hg, torr; PEL: permissible exposure level; TWA: time weighted average; TLV: threshold limit value; TG: Test Guideline; NIOSH: National Institute for Occupational Safety and Health; IARC: International Agency for Research on Cancer; NTP: National Toxicology Program; HMIS: Hazardous Material Information System; CAS No.: Chemical Abstract Service Registration Number; EC No.: European Commission Registration Number; EC Index No.: European Commission Index Number; OECD: The Organisation for Economic Co-operation and Development; GHS: The Globally Harmonized System of Classification and Labelling; APF: Assigned Protection Factor.

### Hazard Rating

**Health**
- 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given

**Flammability**
- 3 Serious Hazard - Materials capable of ignition under almost all normal temperature conditions. Includes flammable liquids with flash points below 73 F and boiling points above 100 F. as well as liquids with flash points between 73 F and 100 F. (Classes IB & IC)

**Physical**
- 1 Slight Hazard - Materials that are normally stable but can become unstable (self-react) at high temperatures and pressures. Materials may react non-violently with water or undergo hazardous polymerization in the absence of inhibitors.

Prepared by safety and environmental affairs.

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SDS US (GHS HazCom 2012) - Custom

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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**UtenSil® Primer P1**
Adhesive/Primer for Reprographic Grade Silicones

**Description**
UtenSil® Primer P1 enhances the adhesion of reprographic silicones to a desired substrate.

**Solution Properties**
- Form: clear, colorless
- Solids: 5-10 wt%
- Flashpoint: -4°C
- Specific Gravity: 0.70
- Viscosity: 1.0-2.0 cSt

**Shelf life**
12 months when stored below 25°C in sealed containers. Keep container sealed after dispensing product.

**Application Methods**
UtenSil® Primer P1 is applied as a coating by spraying, dipping or brushing. The solvent is removed by evaporation in an exhausted area. Moisture induced crosslinking occurs at room temperature over 1-2 hours at 35-85% relative humidity.

**Standard Packaging**
PP1-USP1 UtenSil® Primer P1
- 100 g
- 1 kg

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**UtenSil® Bonding Agent B1**
Bonding Agent for Reprographic Grade Silicones

**Description**
UtenSil® Bonding Agent B1 binds reprographic silicone surfaces together irreversibly.

**Solution Properties**
- Form: opaque, white*
- Solids: 5-10 wt%
- Flashpoint: -1°C
- Specific Gravity: 0.78
- Viscosity: 2.0-3.0 cSt

*Turns clear after deactivation.

**Shelf life**
6 months when stored below 25°C in sealed containers. Keep container sealed after dispensing product.

**Application Methods**
UtenSil® Bonding Agent B1 is applied by spraying, dipping or brushing. The solvent is removed by evaporation in an exhausted area. Bonding of silicone surfaces occurs at 80°C over 4 hours. After bonding is complete the process is deactivated by heating to 140°C for 4 hours in a exhausted area. An amine odor is generated during the deactivation step.

**Standard Packaging**
PP1-USB1 UtenSil® Bonding Agent B1
- 100 g
- 1 kg