1 Identification

Product identifier

Trade name: Perm-A-Barrier VPL 50

SDS ID Number: 2751

Relevant identified uses of the substance or mixture, and uses advised against
Specialty construction product. Not intended for other uses

Details of the supplier of the safety data sheet

Manufacturer/Supplier:
GCP Applied Technologies
62 Whittemore Avenue
Cambridge, MA 02140 USA

GCP Canada, Inc.
294 Clements Road W.
Ajax, Ontario L1S 3C6 Canada

Information department:
Environmental Health & Safety
USA: +1-617-876-1400 (24 hours)
+1-800-354-5414 (8AM - 5PM) Not functional within Massachusetts
CAN: 1-905-683-8561 (24 hours)
Email address: msds.gcp@gcpat.com

Transport Emergency: Chemtrec +1-800-424-9300 (24 hours)

2 Hazard(s) identification

Classification of the substance or mixture

Combustible liquid.
May cause an allergic skin reaction.
May cause cancer. Route of exposure: Inhalation.
May damage fertility or the unborn child.

Label elements: The product is classified and labeled according to the Globally Harmonized System (GHS)

Hazard pictograms

GHS07 | GHS08

Danger

Hazard statements
Combustible liquid.
May cause an allergic skin reaction.
May cause cancer. Route of exposure: Inhalation.
May damage fertility or the unborn child.

Precautionary statements
Avoid breathing dust/fume/gas/mist/vapors/spray
Keep away from flames and hot surfaces. – No smoking.
Wear protective gloves / eye protection / face protection.
Do not handle until all safety precautions have been read and understood.
43.2.6 IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. IF exposed or concerned: Get medical advice/attention. Store in a well-ventilated place. Keep cool.

NFPA ratings (scale 0 - 4)

Health = 2  
Fire = 2  
Reactivity = 0

HMIS-ratings (scale 0 - 4)

HEALTH  
FIRE  
REACTIVITY  

Health = *2  
Flammability = 2  
Reactivity = 0

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Mixture

Description: Mixture of the hazardous substance(s) listed below with additional nonhazardous ingredients.

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>13463-67-7 Titanium dioxide</td>
<td>3.0-5.0%</td>
</tr>
<tr>
<td>64742-47-8 Distillate (petroleum), light hydrotreated</td>
<td>1.0-3.0%</td>
</tr>
<tr>
<td>2768-02-7 trimethoxyvinylsilane</td>
<td>1.0-3.0%</td>
</tr>
<tr>
<td>1760-24-3 N-(3-(trimethoxysilyl)propyl)ethylenediamine</td>
<td>0.1-1.0%</td>
</tr>
<tr>
<td>22673-19-4 Dibutyltin bis(acetylacetonate)</td>
<td>0.1-1.0%</td>
</tr>
<tr>
<td>25973-55-1 2-(2H-Benzotriazole-2-XY)-4,6-Ditertpentyl-phenol</td>
<td>0.1-0.3%</td>
</tr>
<tr>
<td>14808-60-7 Quartz (SiO2)</td>
<td>0.1-0.3%</td>
</tr>
</tbody>
</table>

Additional information: Non-hazardous ingredients may be listed in Section 15; Right-To-Know disclosure.

4 First-aid measures

Description of first aid measures

General information: Get medical advice/attention if you feel unwell.

After inhalation:
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

After skin contact:
Immediately wash contaminated skin with soap or mild detergent and water. If this chemical soaks clothing, immediately remove clothing and wash skin.

After eye contact: Rinse cautiously with water for several minutes.

After swallowing:
Rinse mouth.

Do NOT induce vomiting.
Trade name: *Perm-A-Barrier VPL 50*

**Information for doctor:**
Most important symptoms and effects, both acute and delayed: Allergic reactions
Indication of any immediate medical attention and special treatment needed: No further relevant information available.

**5 Fire-fighting measures**

**Extinguishing media**
Suitable extinguishing agents: CO2. Do not use water.
For safety reasons unsuitable extinguishing agents: Water

Special hazards arising from the substance or mixture: No further relevant information available.

**6 Accidental release measures**

**Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.

Environmental precautions: Prevent seepage into sewage system, workpits and cellars.

Methods and material for containment and cleaning up:
Dispose contaminated material as waste according to section 13 of the SDS.

Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

**7 Handling and storage**

**Handling:**
Precautions for safe handling: No special precautions are necessary if used correctly.
Information about protection against explosions and fires:
Empty containers may retain hazardous residue, both liquid and vapor.
Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).

Conditions for safe storage, including any incompatibilities
Storage:
Information about storage in one common storage facility: No special measures required.
Further information about storage conditions: Keep receptacle tightly sealed.
Specific end use(s): No further relevant information available.

**8 Exposure controls/personal protection**

Additional information about design of technical systems: No further data; see item 7.
Control parameters

Components with limit values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th>Component</th>
<th>Limit Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>13463-67-7 Titanium dioxide</td>
<td>PEL (USA) Long-term value: 15* mg/m³ total dust</td>
</tr>
<tr>
<td></td>
<td>REL (USA) See Pocket Guide App. A</td>
</tr>
<tr>
<td></td>
<td>TLV (USA) Long-term value: 10 mg/m³ withdrawn from NIC</td>
</tr>
</tbody>
</table>

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls

Personal protective equipment:

General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Store protective clothing separately.

Breathing equipment:

Control exposure to ingredients with workplace control parameters if mentioned above. If no ingredients are listed, respiratory protection is generally not required.

If exposure limits are listed and may be exceeded, use approved respiratory protective equipment and filter type appropriate for the listed ingredients. (NIOSH, CEN, etc.).

Protection of hands: Impervious gloves

Eye protection:

Safety glasses with side shield protection.

A face shield should also be worn if there is potential exposure to splash or spray.

Body protection:

Use personal protective equipment as required.

Take off contaminated clothing.

9 Physical and chemical properties

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Liquid</td>
</tr>
<tr>
<td>Form</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>According to product specification</td>
</tr>
<tr>
<td>Odor</td>
<td>Characteristic</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not determined.</td>
</tr>
<tr>
<td>pH-value (-)</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Change in condition</td>
<td></td>
</tr>
<tr>
<td>Melting point/Melting range</td>
<td>Undetermined.</td>
</tr>
<tr>
<td>Boiling point/Boiling range</td>
<td>Undetermined.</td>
</tr>
</tbody>
</table>
### Trade name: Perm-A-Barrier VPL 50

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash point</td>
<td>82°C (181 °F)</td>
</tr>
<tr>
<td>Flammability (solid, gaseous)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Auto igniting</td>
<td>Product is not selfigniting.</td>
</tr>
<tr>
<td>Danger of explosion</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Explosion limits</td>
<td></td>
</tr>
<tr>
<td>Lower</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Upper</td>
<td>Not determined.</td>
</tr>
<tr>
<td>VOC Content (max)</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Density: (~)</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Solubility in / Miscibility with</td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>Not miscible or difficult to mix.</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water)</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Viscosity</td>
<td></td>
</tr>
<tr>
<td>Dynamic</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Kinematic</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Molecular weight</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Other information</td>
<td>No further relevant information available.</td>
</tr>
</tbody>
</table>

#### 10 Stability and reactivity

**Reactivity** Stable under normal conditions.

**Chemical stability**

**Thermal decomposition**: No decomposition if used according to specifications.

**Possibility of hazardous reactions** No further relevant information available.

**Conditions to avoid** No further relevant information available.

**Incompatible materials**: Strong oxidizers.

**Hazardous decomposition products**: Carbon monoxide and carbon dioxide

Other potentially hazardous products may also be formed.

#### 11 Toxicological information

**Information on toxicological effects**

**Acute toxicity**

**LD/LC50 values relevant for classification**

- 13463-67-7 Titanium dioxide
  - Oral LD50: > 5000 mg/kg (rat)

**Primary irritant effect**

- on the skin: No irritating effect expected
- on the eye: No irritating effect expected
- inhalation: No irritating effect expected
Sensitization: May cause an allergic skin reaction.

Additional toxicological information:

13463-67-7 Titanium dioxide  
Inhalation NOAEC 10 mg/m³ (rat)

Carcinogenic categories

IARC (International Agency for Research on Cancer) Human Carcinogenicity:  
Group 1- Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable

<table>
<thead>
<tr>
<th>Compound</th>
<th>Carcinogenicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>13463-67-7 Titanium dioxide</td>
<td>2B</td>
</tr>
<tr>
<td>14808-60-7 Quartz (SiO2)</td>
<td>1</td>
</tr>
</tbody>
</table>

NTP (National Toxicology Program)  
K- Known to be carcinogenic, R- May reasonably be anticipated to be carcinogenic

<table>
<thead>
<tr>
<th>Compound</th>
<th>Carcinogenicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>14808-60-7 Quartz (SiO2)</td>
<td>K</td>
</tr>
</tbody>
</table>

OSHA-Ca (Occupational Safety & Health Administration)  
None of the ingredients is listed.

12 Ecological information

Toxicity

Aquatic toxicity: No further relevant information available.

Persistence and degradability No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential No further relevant information available.

Mobility in soil No further relevant information available.

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

Other adverse effects No further relevant information available.

13 Disposal considerations

Waste treatment methods Comply with Federal, State and local regulations.

Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

14 Transport information

UN-Number DOT, IMDG, IATA Not applicable.
Trade name: *Perm-A-Barrier VPL 50*

<table>
<thead>
<tr>
<th>UN proper shipping name</th>
<th>DOT, IMDG, IATA</th>
<th>Not applicable.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport hazard class(es)</td>
<td>DOT, IMDG, IATA</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Class</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Packing group</td>
<td>DOT, IMDG, IATA</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Environmental hazards:</td>
<td>Not applicable.</td>
<td></td>
</tr>
<tr>
<td>Special precautions for user</td>
<td>Not applicable.</td>
<td></td>
</tr>
<tr>
<td>Stowage Category</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Transport/Additional information:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DOT Remarks:</td>
<td>Non-bulk over the road shipments are not regulated.</td>
<td></td>
</tr>
</tbody>
</table>

**15 Regulatory information**

**SARA (Superfund Amendments and Reauthorization Act)**

- **Section 302/304 (extremely hazardous substances):**
  None of the ingredients is listed.

- **Section 313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):**
  None of the ingredients is listed.

**SARA Section 312/Tier I & II Hazard Categories:**
- Physical Hazard - Flammable (gases, aerosols, liquids, or solids)
- Health Hazard - Carcinogenicity
- Health Hazard - Reproductive toxicity
- Health Hazard - Respiratory or Skin Sensitization

**North America Chemical Inventory Status**

**TSCA (Toxic Substances Control Act - United States):**
- All ingredients are listed or exempt from listing unless otherwise noted below.

**CEPA (Canadian DSL):**
- All ingredients are listed or exempt from listing unless otherwise noted below.

**Right to Know Ingredient Disclosure:**
- 1317-65-3 Calcium carbonate
- Silyl Terminated Polyether
- 25322-69-4 Polypropylene glycol

**California Proposition 65**

- **Chemicals known to cause cancer:**
  - Titanium dioxide
  - Quartz (SiO2)

- **Chemicals known to cause reproductive toxicity for females:**
  None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for males:**
  None of the ingredients is listed.

- **Chemicals known to cause developmental toxicity:**
  - 67-56-1 Methanol
Carcinogenicity Categories

<table>
<thead>
<tr>
<th>Source</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EPA (Environmental Protection Agency)</strong></td>
<td>None of the ingredients is listed.</td>
</tr>
<tr>
<td><strong>TLV-ACGIH (THE American Conference of Governmental Industrial Hygienists)</strong></td>
<td>Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classifiable</td>
</tr>
<tr>
<td><strong>Titanium dioxide</strong></td>
<td>A4</td>
</tr>
<tr>
<td><strong>NIOSH-Cancer (National Institute for Occupational Safety and Health)</strong></td>
<td>13463-67-7 Titanium dioxide 14808-60-7 Quartz (SiO2)</td>
</tr>
<tr>
<td><strong>Volatile Organic Compounds (VOC) reported per the Emission Standards.</strong></td>
<td>48g/L</td>
</tr>
</tbody>
</table>

16 Other information

The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection.

**Department issuing SDS:**
GCP Applied Technologies
62 Whittemore Avenue
Cambridge, MA 02140 USA
USA: +1-617-876-1400 (24 hours) +1-800-354-5414

**Other Information:**
There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis. Therefore preventing the onset of silicosis will also reduce the cancer risk.

**Date of preparation / last revision:** 12/20/2016 / -

**The first date of preparation:** 11/30/2016

**Number of revision times and the latest revision date:** 1.0 / 12/20/2016