1 Identification

Product identifier

Trade name: Perm-A-Barrier Adhesive

SDS ID Number: 2567

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

Highly flammable liquid and vapor.
Harmful if swallowed.
Causes skin irritation.
Causes serious eye irritation.
May cause genetic defects.
May cause cancer.
Suspected of damaging fertility or the unborn child.
May cause drowsiness or dizziness.
May cause damage to organs through prolonged or repeated exposure.
May be fatal if swallowed and enters airways.

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

Hazard pictograms

GHS02 GHS07 GHS08

Danger

Hazard statements

Highly flammable liquid and vapor.
Trade name: *Perm-A-Barrier Adhesive*

Harmful if swallowed.
Causes skin irritation.
Causes serious eye irritation.
May cause genetic defects.
May cause cancer.
Suspected of damaging fertility or the unborn child.
May cause drowsiness or dizziness.
May cause damage to organs through prolonged or repeated exposure.
May be fatal if swallowed and enters airways.

**Precautionary statements**
Avoid breathing dust/fume/gas/mist/vapors/spray
Keep away from heat/sparks/open flames/hot surfaces. No smoking.
Wear protective gloves / eye protection / face protection.
Take precautionary measures against static discharge.
IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
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.

**Hazard description:** Flammable

**NFPA ratings (scale 0 - 4)**

- Health = 3
- Fire = 3
- Reactivity = 0

**HMIS-ratings (scale 0 - 4)**

- Health = *3
- Flammability = 3
- 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.

**Hazardous components:**

| 79-20-9  | methyl acetate | 50-100% |
| 98-56-6  | 4-chloro-alpha,alpha,alpha-trifluorotoluene | 10-20% |
| 110-54-3 | n-Hexane | 10-20% |
| 110-82-7 | cyclohexane | 5-10% |
| 142-82-5 | Heptane | 5-10% |
| 64742-89-8 | Solvent naphtha (petroleum), light aliph. | 5-10% |

**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.
Trade name: Perm-A-Barrier Adhesive

After inhalation:
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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.

Information for doctor:
Most important symptoms and effects, both acute and delayed
Harmful: may cause lung damage if swallowed.
Harmful if swallowed.
Irritating to eyes.

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, extinguishing powder or water spray. Fight larger fire with alcohol resistant foam.

For safety reasons unsuitable extinguishing agents: Water with full jet

Special hazards arising from the substance or mixture
During heating or in case of fire poisonous gases are produced.

Additional information Collect contaminated fire fighting water separately. It must not enter the sewage system.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures
Wear protective equipment. Keep unprotected persons away.
Use respiratory protective device against the effects of fumes/dust/aerosol.

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
Prevent formation of aerosols.
Flammable mixtures with air can be formed in emptied containers. Do not puncture, cut, drill, heat or weld uncleaned drums.
Avoid contact with skin.
Avoid contact with eyes.
Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Use only in explosion protected area.
Protect against electrostatic charges.
Keep respiratorator available.
Use explosion-proof apparatus / fittings and spark-proof tools.
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:
Use only in explosion protected area.
Keep respiratorator available.

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

<table>
<thead>
<tr>
<th>Components with limit values that require monitoring at the workplace:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>79-20-9 methyl acetate</td>
<td></td>
</tr>
<tr>
<td>PEL (USA)</td>
<td>Long-term value: 610 mg/m³, 200 ppm</td>
</tr>
<tr>
<td>REL (USA)</td>
<td>Short-term value: 760 mg/m³, 250 ppm</td>
</tr>
<tr>
<td>Long-term value: 610 mg/m³, 200 ppm</td>
<td></td>
</tr>
<tr>
<td>TLV (USA)</td>
<td>Short-term value: 757 mg/m³, 250 ppm</td>
</tr>
<tr>
<td>Long-term value: 606 mg/m³, 200 ppm</td>
<td></td>
</tr>
<tr>
<td>110-54-3 n-Hexane</td>
<td></td>
</tr>
<tr>
<td>PEL (USA)</td>
<td>Long-term value: 1800 mg/m³, 500 ppm</td>
</tr>
<tr>
<td>REL (USA)</td>
<td>Long-term value: 180 mg/m³, 50 ppm</td>
</tr>
<tr>
<td>TLV (USA)</td>
<td>Long-term value: 176 mg/m³, 50 ppm</td>
</tr>
<tr>
<td>Skin; BEI</td>
<td></td>
</tr>
<tr>
<td>110-82-7 cyclohexane</td>
<td></td>
</tr>
<tr>
<td>PEL (USA)</td>
<td>Long-term value: 1050 mg/m³, 300 ppm</td>
</tr>
<tr>
<td>REL (USA)</td>
<td>Long-term value: 1050 mg/m³, 300 ppm</td>
</tr>
</tbody>
</table>
Trade name: *Perm-A-Barrier Adhesive*

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>TLV (USA) Long-term value</th>
<th>PEL (USA) Long-term value</th>
<th>REL (USA) Long-term value</th>
<th>Ceiling limit value: 1800* mg/m³, 440* ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heptane</td>
<td>344 mg/m³, 100 ppm</td>
<td>2000 mg/m³, 500 ppm</td>
<td>350 mg/m³, 85 ppm</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>110-54-3 n-Hexane</td>
<td>2050 mg/m³, 500 ppm</td>
<td>1640 mg/m³, 400 ppm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Ingredients with biological limit values:**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>BEI (USA) 0.4 mg/L</th>
<th>Medium: urine</th>
<th>Time: end of shift at end of workweek</th>
<th>Parameter: 2.5-Hexanediione without hydrolysis</th>
</tr>
</thead>
</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:** Butyl rubber, BR

**Material of gloves** Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

**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**

**General Information**

**Appearance:**

- Form: Liquid
- Color: Clear
### 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.

### 11 Toxicological information

**Delayed and immediate effects and chronic effects from short or long term exposure**

May cause damage to organs through prolonged or repeated exposure.
### Information on toxicological effects

#### Acute toxicity:

<table>
<thead>
<tr>
<th>LD/LC50 values relevant for classification:</th>
</tr>
</thead>
<tbody>
<tr>
<td>79-20-9 methyl acetate</td>
</tr>
<tr>
<td>Dermal LD50 6970 mg/kg (rat)</td>
</tr>
<tr>
<td>110-82-7 cyclohexane</td>
</tr>
<tr>
<td>Dermal LD50 12705 mg/kg (rat)</td>
</tr>
</tbody>
</table>

**Primary irritant effect:**
- **on the skin:** Causes skin irritation.
- **on the eye:** Causes serious eye irritation.
- **inhalation:** No irritating effect expected

**Ingestion:**
Harmful: may cause lung damage if swallowed.
May cause damage to organs through prolonged or repeated exposure.

**Additional toxicological information:**
- The product can cause inheritable damage.
- Suspected of damaging fertility or the unborn child.

**Carcinogenic categories**

| IARC (International Agency for Research on Cancer) Human Carcinogenicity: |
| Group 1- Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable |
| None of the ingredients is listed. |

| NTP (National Toxicology Program) |
| K–Known to be carcinogenic, R–May reasonably be anticipated to be carcinogenic |
| None of the ingredients is listed. |

| 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.

**Additional ecological information:**
- **General notes:** Not known to be hazardous to water.

**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:

![Trash Can Icon]

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

<table>
<thead>
<tr>
<th>UN-Number</th>
<th>DOT, IMDG, IATA</th>
<th>UN1133</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UN proper shipping name</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DOT</td>
<td>Adhesives</td>
<td></td>
</tr>
<tr>
<td>IMDG</td>
<td>ADHESIVES (HEPTANES, CYCLOHEXANE), MARINE POLLUTANT</td>
<td></td>
</tr>
<tr>
<td>IATA</td>
<td>ADHESIVES</td>
<td></td>
</tr>
</tbody>
</table>

### Transport hazard class(es)

**DOT**

- **Class**: 3 Flammable liquids
- **Label**: 3

**IMDG**

- **Class**: 3 Flammable liquids
- **Label**: 3

**IATA**

- **Class**: 3 Flammable liquids
- **Label**: 3

### Packing group

**DOT, IMDG, IATA**: II

### Environmental hazards:

- **Product contains environmentally hazardous substances**: cyclohexane, Heptane
- **Marine pollutant**: Yes (DOT)
- **Symbol (fish and tree)**
- **Special marking (ADR)**
  - Symbol (fish and tree)

### Special precautions for user

- **Warning**: Flammable liquids
- **Danger code (Kemler)**: 30
- **EMS Number**: F-E,S-D
- **Stowage Category**: A
Trade name: *Perm-A-Barrier Adhesive*

### Transport/Additional information:

<table>
<thead>
<tr>
<th>DOT</th>
<th>Remarks:</th>
<th>Special marking with the symbol (fish and tree).</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>IMDG</th>
<th>Limited quantities (LQ)</th>
<th>5L</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Excepted quantities (EQ)</td>
<td>Code: E1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maximum net quantity per inner packaging: 30 ml</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maximum net quantity per outer packaging: 1000 ml</td>
</tr>
</tbody>
</table>

**UN "Model Regulation":** UN 1133 ADHESIVES, 3, II, ENVIRONMENTALLY HAZARDOUS

### 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):**

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Chemical</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>110-54-3</td>
<td>n-Hexane</td>
<td>10.5%</td>
</tr>
<tr>
<td>110-82-7</td>
<td>Cyclohexane</td>
<td>5.3%</td>
</tr>
</tbody>
</table>

**SARA Section 312/Tier I & II Hazard Categories:**

- Physical Hazard - Flammable (gases, aerosols, liquids, or solids)
- Health Hazard - Carcinogenicity
- Health Hazard - Acute toxicity (any route of exposure)
- Health Hazard - Reproductive toxicity
- Health Hazard - Skin Corrosion or Irritation
- Health Hazard - Serious eye damage or eye irritation
- Health Hazard - Specific target organ toxicity (single or repeated exposure)
- Health Hazard - Aspiration Hazard
- Health Hazard - Germ cell mutagenicity

**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.

**California Proposition 65**

**Chemicals known to cause cancer:**

None of the ingredients is listed.

**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:**

None of the ingredients is listed.

**Carcinogenicity Categories**

**EPA (Environmental Protection Agency)**

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Chemical</th>
<th>Carcinogenicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>110-54-3</td>
<td>n-Hexane</td>
<td>ii</td>
</tr>
<tr>
<td>110-82-7</td>
<td>Cyclohexane</td>
<td>i</td>
</tr>
<tr>
<td>142-82-5</td>
<td>Heptane</td>
<td>D</td>
</tr>
</tbody>
</table>

**TLV-ACGIH (THE American Conference of Governmental Industrial Hygienists)**

**Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classifiable**

None of the ingredients is listed.
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

Date of preparation / last revision 01/20/2017 / -

The first date of preparation 10/09/2015

Number of revision times and the latest revision date 1.0 / 01/20/2017