1 Identification

Product identifier

Trade name: **Pieri VMR™**

SDS ID Number: 154
Replaces SDS ID Number: D-05947

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

Flam. Liq. 2  H225  Highly flammable liquid and vapor.
Eye Irrit. 2A  H319  Causes serious eye irritation.
STOT SE 3  H336  May cause drowsiness or dizziness.

Label elements:

Hazard pictograms

GHS02  GHS07

Danger

Hazard statements

Highly flammable liquid and vapor.
Causes serious eye irritation.
May cause drowsiness or dizziness.

Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting/equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Avoid breathing dust/fume/gas/mist/vapors/spray

(Cont. on page 2)
Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor if you feel unwell. If eye irritation persists: Get medical advice/attention. In case of fire: Use for extinction: Carbon dioxide. Store in a well-ventilated place. Keep cool. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Hazard description:** Flammable

**NFPA ratings (scale 0 - 4)**
- Health: 2
- Fire: 3
- Reactivity: 0

**HMIS-ratings (scale 0 - 4)**
- Health: 2
- 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

| Hazardous components: | 67-63-0 | Isopropanol | 50-100% |

**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 opened eye for several minutes under running water.

**After swallowing:**
Rinse mouth. Do not induce vomiting; immediately call for medical help. Never give anything by mouth to an unconscious person.
46.1.12

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

5 Fire-fighting measures

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

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

Methods and material for containment and cleaning up:
Contain and/or absorb spill with inert material (i.e. sand, vermiculite) then place in a suitable container.
Sweep up spilled product into receptacles.
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
Open and handle receptacle with care.
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 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.
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).
Trade name: *Pieri VMR™*

### Conditions for safe storage, including any incompatibilities

**Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Use only in explosion protected area.
- **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>
</tr>
</thead>
<tbody>
<tr>
<td><strong>67-63-0 Isopropanol</strong></td>
</tr>
<tr>
<td>PEL (USA)</td>
</tr>
<tr>
<td>REL (USA)</td>
</tr>
<tr>
<td>Long-term value: 980 mg/m³, 400 ppm</td>
</tr>
<tr>
<td>TLV (USA)</td>
</tr>
<tr>
<td>Long-term value: 492 mg/m³, 200 ppm</td>
</tr>
<tr>
<td>BEI</td>
</tr>
</tbody>
</table>

#### Ingredients with biological limit values:

<table>
<thead>
<tr>
<th><strong>67-63-0 Isopropanol</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>BEI (USA)</td>
</tr>
<tr>
<td>Medium: urine</td>
</tr>
<tr>
<td>Time: end of shift at end of workweek</td>
</tr>
<tr>
<td>Parameter: Acetone (background, nonspecific)</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:**
  - Avoid contact with the eyes and skin.
  - The usual precautionary measures for handling chemicals should be followed.

- **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:** Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

- **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.
Safety glasses with side shields should be worn to prevent contact due to splashing. Under high vapor mist concentrations, tightly sealed goggles should be worn.

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

Body protection:
Protective work clothing
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>General Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance:</td>
</tr>
<tr>
<td>Form: Liquid</td>
</tr>
<tr>
<td>Color: According to product specification</td>
</tr>
<tr>
<td>Odor: Characteristic</td>
</tr>
<tr>
<td>Odor threshold: Not determined.</td>
</tr>
<tr>
<td>pH-value (-): Not determined.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Change in condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting point/Melting range: Undetermined.</td>
</tr>
<tr>
<td>Boiling point/Boiling range: 82 °C (179.6 °F)</td>
</tr>
<tr>
<td>Flash point: 13 °C (55.4 °F)</td>
</tr>
</tbody>
</table>

| Flammability (solid, gaseous): Not applicable. |
| Ignition temperature: 425 °C (797 °F) |

| Auto igniting: |
| Product is not self-igniting. |

| Danger of explosion: |
| In use, may form flammable/explosive vapor-air mixture. |

| Explosion limits: |
| Lower: 2.0 Vol % |
| Upper: 12.0 Vol % |

| VOC Content (max): |
| 94.00 % |

| Vapor pressure at 20 °C (68 °F): 43 hPa (32.3 mm Hg) |
| Density: (-) at 20 °C (68 °F): 0.8 g/cm³ (6.7 lbs/gal) |

| Relative density Not determined. |
| Vapor density Not determined. |
| Evaporation rate Not determined. |

| Solubility in / Miscibility with Water: Fully miscible. |

| Partition coefficient (n-octanol/water): Not determined. |

| Viscosity: |
| Dynamic: Not determined. |
| Kinematic: Not determined. |

| Molecular weight Not applicable. |

| Other information |
| No further relevant information available. |
### 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 dangerous reactions known.

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

**Incompatible materials:** No further relevant information available.

**Hazardous decomposition products:**

- Carbon monoxide and carbon dioxide
- Other potentially hazardous products may also be formed.

**Additional information:** See section 7 for information on handling, storage and conditions to be avoided.

### 11 Toxicological information

#### Information on toxicological effects

**Acute toxicity:**

**LD/LC50 values relevant for classification:**

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Compound</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LD50</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-63-0</td>
<td>Isopropanol</td>
<td>5,045 mg/kg (rat)</td>
<td>4,570 mg/kg (rat)</td>
<td>13,400 mg/kg (rabbit)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12,800 mg/kg (rabbit) (cutaneous)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,088 mg/kg (rat) (cutaneous)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>30 mg/l (rat)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>72,600 mg/m³ (rat)</td>
</tr>
</tbody>
</table>

**Primary irritant effect:**

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

**Additional toxicological information:**

**Carcinogenic categories**

<table>
<thead>
<tr>
<th>Agency</th>
<th>Classification</th>
<th>CAS Number</th>
<th>Compound</th>
</tr>
</thead>
<tbody>
<tr>
<td>IARC (International Agency for Research on Cancer) Human Carcinogenicity</td>
<td>Group 1- Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable</td>
<td>67-63-0</td>
<td>Isopropanol</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9003-39-8</td>
<td>Polyvinyl pyridone</td>
</tr>
<tr>
<td></td>
<td></td>
<td>13463-67-7</td>
<td>Titanium dioxide</td>
</tr>
<tr>
<td>NTP (National Toxicology Program)</td>
<td>K–Known to be carcinogenic, R–May reasonably be anticipated to be carcinogenic</td>
<td>None of the ingredients is listed.</td>
<td></td>
</tr>
<tr>
<td>OSHA-Ca (Occupational Safety &amp; Health Administration)</td>
<td>None of the ingredients is listed.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
12 Ecological information

Toxicity

Aquatic toxicity:

<table>
<thead>
<tr>
<th>67-63-0 Isopropanol</th>
</tr>
</thead>
<tbody>
<tr>
<td>CL50, 96h</td>
</tr>
<tr>
<td>CE50, 48h</td>
</tr>
<tr>
<td>CE50, 72h</td>
</tr>
</tbody>
</table>

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: Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Results of PBT and vPvB assessment

PBT: Not applicable.
vPvB: Not applicable.

Other adverse effects No further relevant information available.

13 Disposal considerations

Disposal methods:

Consult all regulations (federal, state, provincial, local) or a qualified waste disposal firm when characterizing product for disposal. Dispose of waste in accordance with all applicable regulations.

Recommendation:

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

Uncleaned packagings:

Recommendation: Dispose of contents/container in accordance with local/regional/national/international regulations.

14 Transport information

<table>
<thead>
<tr>
<th>UN-Number</th>
<th>UN1219</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT, IMDG, IATA</td>
<td></td>
</tr>
</tbody>
</table>

UN proper shipping name

| DOT |
| IMDG, IATA |
| Isopropanol mixture | ISOPROPANOL (ISOPROPYL ALCOHOL) mixture |
### Transport hazard class(es)

**DOT**

<table>
<thead>
<tr>
<th>Class</th>
<th>3 Flammable liquids</th>
</tr>
</thead>
<tbody>
<tr>
<td>Label</td>
<td>3</td>
</tr>
</tbody>
</table>

**IMDG, IATA**

<table>
<thead>
<tr>
<th>Class</th>
<th>3 Flammable liquids</th>
</tr>
</thead>
<tbody>
<tr>
<td>Label</td>
<td>3</td>
</tr>
</tbody>
</table>

### Packing group

**DOT, IMDG, IATA**

| II |

### Environmental hazards:

**Marine pollutant:**

No

### Special precautions for user

**Warning:** Flammable liquids

**Danger code (Kemler):**

33

**EMS Number:**

F-E,S-D

**Stowage Category**

B

### Transport/Additional information:

**IMDG**

<table>
<thead>
<tr>
<th>Limited quantities (LQ)</th>
<th>1L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excepted quantities (EQ)</td>
<td>Code: E2</td>
</tr>
</tbody>
</table>

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

**UN "Model Regulation":**

UN 1219 ISOPROPANOL MIXTURE, 3, II

---

### 15 Regulatory information

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

None of the ingredients is listed.

**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>67-63-0</th>
<th>Isopropanol</th>
</tr>
</thead>
</table>

93.1%

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

Physical Hazard - Flammable (gases, aerosols, liquids, or solids)

Health Hazard - Serious eye damage or eye irritation

Health Hazard - Specific target organ toxicity (single or repeated exposure)

---

**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:**

| 9003-39-8 | Polyvinyl pyridone |

(Cont. on page 9)
Trade name: *Pieri VMR™*

<table>
<thead>
<tr>
<th>Substance ID</th>
<th>Substance Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>56-81-5</td>
<td>Glycerol</td>
</tr>
</tbody>
</table>

*California Proposition 65: (Substances <0.1% unless noted in Section 3)*

**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

- **TLV-ACGIH (THE American Conference of Governmental Industrial Hygienists)**
  - Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classifiable

- **Isopropanol**
  - A4

- **NIOSH-Cancer (National Institute for Occupational Safety and Health)**
  - 13463-67-7 Titanium dioxide

- **Volatile Organic Compounds (VOC) reported per the Emission Standards:** 753.0 g/l / 6.28 lb/gl

---

### 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** 07/03/2018 / 1.0

**The first date of preparation** 08/18/2006

**Number of revision times and the latest revision date** 1.1 / 07/03/2018

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