1 Identification

Product identifier

Trade name: Pieri Form Seal 245™

SDS ID Number: 77

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. 3 H226 Flammable liquid and vapor.
Acute Tox. 2 H330 Fatal if inhaled.
Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2A H319 Causes serious eye irritation.
Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin Sens. 1 H317 May cause an allergic skin reaction.
Carc. 2 H351 Suspected of causing cancer.
Repr. 2 H361 Suspected of damaging fertility or the unborn child.
STOT SE 3 H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.
STOT RE 2 H373 May cause damage to the lung through prolonged or repeated exposure.
Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

Label elements:

Hazard pictograms

GHS02  GHS06  GHS07  GHS08

Danger

Hazard statements
Flammable liquid and vapor.
Trade name: Pieri Form Seal 245™

Fatal if inhaled.
Causes skin irritation.
Causes serious eye irritation.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
Suspected of causing cancer.
Suspected of damaging fertility or the unborn child.
May cause respiratory irritation. May cause drowsiness or dizziness.
May cause damage to the lung through prolonged or repeated exposure.
May be fatal if swallowed and enters airways.

Precautionary statements
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting/equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Do not breathe dust/fume/gas/mist/vapors/spray.
Wash thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing should not be allowed out of the workplace.
Wear protective gloves/protective clothing/eye protection/face protection.
[In case of inadequate ventilation] wear respiratory protection.
If swallowed: Immediately call a poison center/doctor.
Do NOT induce vomiting.
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.
IF exposed or concerned: Get medical advice/attention.
Call a poison center/doctor if you feel unwell.
Get medical advice/attention if you feel unwell.
Take off contaminated clothing and wash it before reuse.
If skin irritation or rash occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
If experiencing respiratory symptoms: Call a poison center/doctor.
Wash contaminated clothing before reuse.
In case of fire: Use for extinction: CO2, powder or water spray.
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 = 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

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>30-50%</th>
<th>10-20%</th>
<th>0.1-1.0%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1330-20-7 Xylene</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100-41-4 Ethylbenzene</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26471-62-5 m-tolylidene diisocyanate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>108-88-3 Toluene</td>
<td></td>
<td></td>
<td></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:
Do not induce vomiting; immediately call for medical help.

Never give anything by mouth to an unconscious person.

Information for doctor:

Most important symptoms and effects, both acute and delayed No further relevant information available.

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, sand, extinguishing powder. Do not use water.

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.

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.
7 Handling and storage

Handling:

Precautions for safe handling
Avoid contact with skin.
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.

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.
Ground container to avoid electric sparks, especially in contact with flammable substances.

Conditions for safe storage, including any incompatibilities

Storage:

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>1330-20-7 Xylene</td>
</tr>
<tr>
<td>PEL (USA)  Long-term value: 435 mg/m³, 100 ppm</td>
</tr>
<tr>
<td>REL (USA)  Short-term value: 655 mg/m³, 150 ppm</td>
</tr>
<tr>
<td>TLV (USA)  Long-term value: 435 mg/m³, 100 ppm</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>100-41-4 Ethylbenzene</td>
</tr>
<tr>
<td>PEL (USA)  Long-term value: 435 mg/m³, 100 ppm</td>
</tr>
<tr>
<td>REL (USA)  Short-term value: 545 mg/m³, 125 ppm</td>
</tr>
<tr>
<td>TLV (USA)  Long-term value: 435 mg/m³, 100 ppm</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
### 26471-62-5 m-tolyldiene diisocyanate

| PEL (USA) | Ceiling limit value: 0.14 mg/m³, 0.02 ppm |
| REL (USA) | LFC |
| TLV (USA) | Short-term value: (0.14) NIC-0.021* mg/m³, (0.02) NIC-0.003* ppm |
| Long-term value: (0.036) NIC-0.007* mg/m³, (0.005) NIC-0.001* ppm |

*(IFV) SEN; NIC-Skin; A3

### 108-88-3 Toluene

| PEL (USA) | Long-term value: 200 ppm |
| Ceiling limit value: 300; 500* ppm |
| *10-min peak per 8-hr shift |

| REL (USA) | Short-term value: 560 mg/m³, 150 ppm |
| Long-term value: 375 mg/m³, 100 ppm |

| TLV (USA) | Long-term value: 75 mg/m³, 20 ppm |

**BEI**

### Ingredients with biological limit values:

#### 1330-20-7 Xylene

| BEI (USA) | 1.5 g/g creatinine |
| Medium: urine |
| Time: end of shift |
| Parameter: Methylhippuric acids |

#### 100-41-4 Ethylbenzene

| BEI (USA) | 0.7 g/g creatinine |
| Medium: urine |
| Time: end of shift at end of workweek |
| Parameter: Sum of mandelic acid and phenylglyoxylic acid (nonspecific, semi-quantitative) |

| Medium: end-exhaled air |
| Time: not critical |
| Parameter: Ethyl benzene (semi-quantitative) |

#### 108-88-3 Toluene

| BEI (USA) | 0.02 mg/L |
| Medium: blood |
| Time: prior to last shift of workweek |
| Parameter: Toluene |
| 0.03 mg/L |
| Medium: urine |
| Time: end of shift |
| Parameter: Toluene |

| 0.3 mg/g creatinine |
| Medium: urine |
| Time: end of shift |
| Parameter: o-Cresol with hydrolysis (background) |

### 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:**

A chemical cartridge respirator with organic vapor cartridge is required if occupational exposure limits are exceeded. A dust/mist cartridge or prefilter may be needed in addition to control exposure to mist. Supplied air respirator (SCBA) is required at exposure levels above the capabilities of a chemical cartridge respirator.
**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><strong>Appearance:</strong></td>
</tr>
<tr>
<td><strong>Form:</strong>                              Liquid</td>
</tr>
<tr>
<td><strong>Color:</strong>                             According to product specification</td>
</tr>
<tr>
<td><strong>Odor:</strong>                             Characteristic</td>
</tr>
<tr>
<td><strong>Odor threshold:</strong>                    Not determined.</td>
</tr>
<tr>
<td><strong>pH-value (-):</strong>                      Not determined.</td>
</tr>
<tr>
<td><strong>Change in condition</strong></td>
</tr>
<tr>
<td><strong>Melting point/Melting range:</strong>       Undetermined.</td>
</tr>
<tr>
<td><strong>Boiling point/Boiling range:</strong>       275 °F</td>
</tr>
<tr>
<td><strong>Flash point:</strong>                       24 °C (75.2 °F)</td>
</tr>
<tr>
<td><strong>Flammability (solid, gaseous):</strong>     Not applicable.</td>
</tr>
<tr>
<td><strong>Ignition temperature:</strong>              Undetermined.</td>
</tr>
<tr>
<td><strong>Decomposition temperature:</strong>         Not determined.</td>
</tr>
<tr>
<td><strong>Auto igniting:</strong>                     Product is not self-igniting.</td>
</tr>
<tr>
<td><strong>Danger of explosion:</strong>               In use, may form flammable/explosive vapor-air mixture.</td>
</tr>
<tr>
<td><strong>Explosion limits:</strong></td>
</tr>
<tr>
<td><strong>Lower:</strong>                            Not determined.</td>
</tr>
<tr>
<td><strong>Upper:</strong>                            Not determined.</td>
</tr>
<tr>
<td><strong>Vapor pressure:</strong>                    Not determined.</td>
</tr>
<tr>
<td><strong>Density:</strong>                          1.0 g/cm³ (8.3 lbs/gal)</td>
</tr>
<tr>
<td><strong>Relative density:</strong>                  Not determined.</td>
</tr>
<tr>
<td><strong>Vapor density</strong>                     Not determined.</td>
</tr>
<tr>
<td><strong>Evaporation rate</strong>                   Not determined.</td>
</tr>
<tr>
<td><strong>Solubility in / Miscibility with</strong></td>
</tr>
<tr>
<td><strong>Water:</strong>                            Not miscible or difficult to mix.</td>
</tr>
<tr>
<td><strong>Partition coefficient (n-octanol/water):</strong></td>
</tr>
<tr>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Viscosity:</strong></td>
</tr>
<tr>
<td><strong>Dynamic:</strong>                          Not determined.</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 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

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:

LD/LC50 values relevant for classification:

<table>
<thead>
<tr>
<th>Substance</th>
<th>LD50</th>
<th>LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>1330-20-7 Xylene</td>
<td>3,523 mg/kg (rat)</td>
<td>26 mg/m³ (rat)</td>
</tr>
<tr>
<td>100-41-4 Ethylbenzene</td>
<td>3,500 mg/kg (rat)</td>
<td>17,800 mg/kg (rabbit)</td>
</tr>
<tr>
<td>26471-62-5 m-tolylidene diisocyanate</td>
<td>0.48 mg/l (rat) (OECD 403)</td>
<td></td>
</tr>
<tr>
<td>108-88-3 Toluene</td>
<td>5,000 mg/kg (rat)</td>
<td>12,124 mg/kg (rabbit)</td>
</tr>
<tr>
<td>71-43-2 Benzene</td>
<td>4,894 mg/kg (rat)</td>
<td>48 mg/kg (mus)</td>
</tr>
</tbody>
</table>

Primary irritant effect: Harmful: danger of serious damage to health by prolonged exposure if swallowed.

on the skin: Causes skin irritation.

on the eye: Causes serious eye irritation.

inhalation:
May cause drowsiness or dizziness.
May cause respiratory irritation.
Trade name: Pieri Form Seal 245™

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

Sensitization:
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.

Additional toxicological information:
Very toxic
Suspected of damaging fertility or the unborn child.
Suspected of causing cancer.
Over exposure by inhalation or ingestion may be fatal. Xylene contained in this product can affect the skin, heart, brain, liver, kidneys and lungs. Chronic exposure may harm a developing fetus and damage bone marrow causing low red blood cell count. Some harmful effects are also possible through skin absorption.

Carcinogenic categories

<table>
<thead>
<tr>
<th>IARC (International Agency for Research on Cancer) Human Carcinogenicity:</th>
<th>Group 1 - Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1330-20-7 Xylene</td>
<td>3</td>
</tr>
<tr>
<td>100-41-4 Ethylbenzene</td>
<td>2B</td>
</tr>
<tr>
<td>26471-62-5 m-tolylidene diisocyanate</td>
<td>2B</td>
</tr>
<tr>
<td>108-88-3 Toluene</td>
<td>3</td>
</tr>
</tbody>
</table>

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

| 26471-62-5 m-tolylidene diisocyanate | R |

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

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.
### 14 Transport information

<table>
<thead>
<tr>
<th>UN-Number</th>
<th>DOT, IMDG, IATA</th>
<th>UN1866</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN proper shipping name</td>
<td>DOT</td>
<td>Resin solution</td>
</tr>
<tr>
<td>IMDG, IATA</td>
<td>Resin solution</td>
<td></td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td>DOT</td>
<td>3 Flammable liquids</td>
</tr>
<tr>
<td></td>
<td>IMDG, IATA</td>
<td>3 Flammable liquids</td>
</tr>
<tr>
<td>Packing group</td>
<td>DOT, IMDG, IATA</td>
<td>III</td>
</tr>
<tr>
<td>Environmental hazards:</td>
<td>Marine pollutant:</td>
<td>No</td>
</tr>
<tr>
<td>Special precautions for user</td>
<td>Warning: Flammable liquids</td>
<td></td>
</tr>
<tr>
<td>Danger code (Kemler):</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>EMS Number:</td>
<td>F-E.S-E</td>
<td></td>
</tr>
<tr>
<td>Stowage Category</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>Transport/Additional information:</td>
<td>IMDG</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Limited quantities (LQ)</td>
<td>5L</td>
</tr>
<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>
<tr>
<td>UN &quot;Model Regulation&quot;:</td>
<td>UN 1866 RESIN SOLUTION, 3, III</td>
<td></td>
</tr>
</tbody>
</table>
15 Regulatory information

SARA (Superfund Amendments and Reauthorization Act)

Section 302/304 (extremely hazardous substances):

108-88-3 Toluene

Section 313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):

1330-20-7 Xylene 46.3%
100-41-4 Ethylbenzene 11.6%

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 - Respiratory or Skin Sensitization
Health Hazard - Serious eye damage or eye irritation
Health Hazard - Specific target organ toxicity (single or repeated exposure)
Health Hazard - Respiratory or Skin Sensitization
Health Hazard - Aspiration Hazard

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):

Inventory listing could not be confirmed for one or more substances.

CEPA (Canadian NDSL):
This product contains a chemical that is on the NDSL inventory.

Right to Know Ingredient Disclosure:

Polyurethane resin

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

Chemicals known to cause cancer:

Ethylbenzene
m-tolylidene diisocyanate
Toluene
Benzene

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

Chemicals known to cause reproductive toxicity for males:
71-43-2 Benzene

Chemicals known to cause developmental toxicity:

108-88-3 Toluene
71-43-2 Benzene

Carcinogenicity Categories

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

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

Xylene A4
Ethylbenzene A3

NIOSH-Cancer (National Institute for Occupational Safety and Health)

26471-62-5 m-tolylidene diisocyanate

Volatile Organic Compounds (VOC) reported per the Emission Standards. 576 g/l / 4.81 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** 01/29/2020 / -

**The first date of preparation** 10/10/2003

**Number of revision times and the latest revision date** 1.1 / 01/29/2020