Phenylacetic Acid

SAFETY DATA SHEET
Phenylacetic Acid

according to Regulation (EC) No. 1907/2006 as amended by (EC) No. 1272/2008

Section 1. Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product Code: 18709
Product Name: Phenylacetic Acid
Synonyms: Benzeneacetic acid; Phenylethanoic acid; NSC 125718; \( \alpha \)-Toluic acid

1.2 Relevant identified uses of the substance or mixture and uses advised against:
Relevant identified uses: For research use only, not for human or veterinary use.

1.3 Details of the Supplier of the Safety Data Sheet:

Company Name: Cayman Chemical Company
1180 E. Ellsworth Rd.
Ann Arbor, MI 48108

Web site address: www.caymanchem.com
Information: +1 (734)971-3335

1.4 Emergency telephone number:
Emergency Contact: CHEMTREC Within USA and Canada: +1 (800)424-9300
CHEMTREC Outside USA and Canada: +1 (703)527-3887

Section 2. Hazards Identification

2.1 Classification of the Substance or Mixture:
Skin Corrosion/Irritation, Category 2
Serious Eye Damage/Eye Irritation, Category 2
Toxic To Reproduction, Category 2
Specific Target Organ Toxicity (single exposure), Category 3

2.2 Label Elements:

GHS Signal Word: Warning

GHS Hazard Phrases:
H315: Causes skin irritation.
H319: Causes serious eye irritation.
H335: May cause respiratory irritation.
H361: Suspected of damaging fertility or the unborn child.

GHS Precaution Phrases:
P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P261: Avoid breathing (dust/fume/gas/mist/vapors/spray).
P264: Wash (hands) thoroughly after handling.
P280: Wear (protective gloves/protective clothing/eye protection/face protection).

GHS Response Phrases:
P302+352: IF ON SKIN: Wash with plenty of soap and water.
P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+313: IF exposed or concerned: Get medical attention/advice.
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Revised: 01/24/2016

P312: Call a POISON CENTER or doctor/physician if you feel unwell.
P332+313: If skin irritation occurs, get medical advice/attention.
P337+313: If eye irritation persists, get medical advice/attention.
P362+364: Take off contaminated clothing and wash it before reuse.

GHS Storage and Disposal Phrases:
Please refer to Section 7 for Storage and Section 13 for Disposal information.

2.3 Adverse Human Health Effects and Symptoms:

- Causes serious eye irritation.
- Causes skin irritation.
- Material may be irritating to the mucous membranes and upper respiratory tract.
- May be harmful by inhalation, ingestion, or skin absorption.
- May cause respiratory system irritation.
- Suspected of damaging fertility or the unborn child.
- To the best of our knowledge, the toxicological properties have not been thoroughly investigated.

Section 3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>CAS # / RTECS #</th>
<th>Hazardous Components (Chemical Name)/REACH Registration No.</th>
<th>Concentration</th>
<th>EC No./EC Index No.</th>
<th>GHS Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>103-82-2 AJ2430000</td>
<td>Benzeneacetic acid</td>
<td>100.0 %</td>
<td>203-148-6 NA</td>
<td>Eye Damage 2: H319, Skin Corr. 2: H315, Toxic Repro. 2: H361, STOT (SE) 3: H335 H336</td>
</tr>
</tbody>
</table>

Section 4. First Aid Measures

4.1 Description of First Aid Measures:

In Case of Inhalation: Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention.

In Case of Skin Contact: Immediately wash skin with soap and plenty of water for at least 15 minutes. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

In Case of Eye Contact: Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Have eyes examined and tested by medical personnel.

In Case of Ingestion: Wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do so by medical personnel.

Section 5. Fire Fighting Measures

5.1 Suitable Extinguishing Media:
Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.

Unsuitable Extinguishing Media:
A solid water stream may be inefficient.

5.2 Flammable Properties and Hazards:

Flash Pt: No data available.

Explosive Limits: No data available.

Autoignition Pt: No data.

5.3 Fire Fighting Instructions:
As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.

Multi-region format
Section 6. Accidental Release Measures

6.1 Protective Precautions, Protective Equipment and Emergency Procedures:

Avoid raising and breathing dust, and provide adequate ventilation.
As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator, and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).

6.2 Environmental Precautions:

Take steps to avoid release into the environment, if safe to do so.

6.3 Methods and Material For Containment and Cleaning:

Contain spill and collect, as appropriate.
Transfer to a chemical waste container for disposal in accordance with local regulations.

Section 7. Handling and Storage

7.1 Precautions To Be Taken in Handling:

Avoid raising and breathing dust, and provide adequate ventilation.
Avoid prolonged or repeated exposure.

7.2 Precautions To Be Taken in Storing:

Keep container tightly closed.
Store in accordance with information listed on the product insert.

Section 8. Exposure Controls/Personal Protection

8.1 Exposure Parameters:

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Partial Chemical Name</th>
<th>Britain EH40</th>
<th>France VL</th>
<th>Europe</th>
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<tbody>
<tr>
<td>103-82-2</td>
<td>Benzeneacetic acid</td>
<td>No data.</td>
<td>No data.</td>
<td>No data.</td>
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</table>

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Partial Chemical Name</th>
<th>OSHA TWA</th>
<th>ACGIH TWA</th>
<th>Other Limits</th>
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</thead>
<tbody>
<tr>
<td>103-82-2</td>
<td>Benzeneacetic acid</td>
<td>No data.</td>
<td>No data.</td>
<td>No data.</td>
</tr>
</tbody>
</table>

8.2 Exposure Controls:

8.2.1 Engineering Controls (Ventilation etc.):

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

8.2.2 Personal protection equipment:

Eye Protection: Safety glasses
Protective Gloves: Compatible chemical-resistant gloves
Other Protective Clothing: Lab coat
Respiratory Equipment: NIOSH approved respirator, as conditions warrant.

Work/Hygienic/Maintenance Practices:

Do not take internally.
Facilities storing or utilizing this material should be equipped with an eyewash and a safety shower.
Wash thoroughly after handling.
No data available.
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Section 9. Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

Physical States: [ ] Gas [ ] Liquid [ X ] Solid

Appearance and Odor: A crystalline solid

Melting Point: No data.

Boiling Point: No data.

Flash Pt: No data.

Evaporation Rate: No data.

Flammability (solid, gas): No data available.

Explosive Limits: LEL: No data. UEL: No data.

Vapor Pressure (vs. Air or mm Hg): No data.

Vapor Density (vs. Air = 1): No data.

Specific Gravity (Water = 1): No data.

Solubility in Water: No data.

Solubility Notes: ~10 mg/ml in PBS (pH 7.2); ~1 mg/ml in DMF;

Autoignition Pt: No data.

9.2 Other Information

Percent Volatile: No data.

Molecular Formula & Weight: C8H8O2 136.2

Section 10. Stability and Reactivity

10.1 Reactivity: No data available.

10.2 Stability: Unstable [ ] Stable [ X ]

10.3 Stability Note(s): Stable if stored in accordance with information listed on the product insert.

Polymerization: Will occur [ ] Will not occur [ X ]

10.4 Conditions To Avoid: No data available.

10.5 Incompatibility - Materials strong bases

To Avoid: strong oxidizing agents

strong reducing agents

10.6 Hazardous Decomposition or Byproducts: No data available.
### Section 11. Toxicological Information

**11.1 Information on Toxicological Effects:**

The toxicological effects of this product have not been thoroughly studied.

**Phenylacetic Acid - Toxicity Data:**
- Oral LD50 (rat): 2250 mg/kg; Intraperitoneal LD50 (rat): 1600 mg/kg; Oral LD50 (mouse): 2250 mg/kg; Intraperitoneal LD50 (mouse): 2270 mg/kg; Subcutaneous LD50 (mouse): 1500 mg/kg;

**Chronic Toxicological Effects:**
Phenylacetic Acid - Investigated as a primary irritant and reproductive effector.

Only select Registry of Toxic Effects of Chemical Substances (RTECS) data is presented here. See actual entry in RTECS for complete information.

Phenylacetic Acid RTECS Number: AJ2430000

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Hazardous Components (Chemical Name)</th>
<th>NTP</th>
<th>IARC</th>
<th>ACGIH</th>
<th>OSHA</th>
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<tbody>
<tr>
<td>103-82-2</td>
<td>Benzeneacetic acid</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

### Section 12. Ecological Information

**12.1 Toxicity:**
Avoid release into the environment.
Runoff from fire control or dilution water may cause pollution.

**12.2 Persistence and Degradability:**
No data available.

**12.3 Bioaccumulative Potential:**
No data available.

**12.4 Mobility in Soil:**
No data available.

**12.5 Results of PBT and vPvB assessment:**
No data available.

**12.6 Other adverse effects:**
No data available.

### Section 13. Disposal Considerations

**13.1 Waste Disposal Method:**
Dispose in accordance with local, state, and federal regulations.

### Section 14. Transport Information

**14.1 LAND TRANSPORT (US DOT):**

<table>
<thead>
<tr>
<th>DOT Proper Shipping Name</th>
<th>DOT Hazard Class</th>
<th>UN/NA Number</th>
<th>Packing Group</th>
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<tbody>
<tr>
<td>Aviation regulated solid, n.o.s. (Phenylacetic acid)</td>
<td>9 - CLASS 9</td>
<td>UN3335</td>
<td>III</td>
</tr>
</tbody>
</table>

**14.1 LAND TRANSPORT (European ADR/RID):**

<table>
<thead>
<tr>
<th>ADR/RID Shipping Name</th>
<th>UN Number</th>
<th>Packing Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aviation regulated solid, n.o.s. (Phenylacetic acid)</td>
<td>3335</td>
<td>III</td>
</tr>
<tr>
<td>Hazard Class</td>
<td>9 - CLASS 9</td>
<td></td>
</tr>
</tbody>
</table>

**14.3 AIR TRANSPORT (ICAO/IATA):**

<table>
<thead>
<tr>
<th>ICAO/IATA Shipping Name</th>
<th>UN Number</th>
<th>Packing Group</th>
<th>IATA Classification</th>
</tr>
</thead>
<tbody>
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<td>III</td>
<td>9</td>
</tr>
</tbody>
</table>

**Additional Transport Information:**
Transport in accordance with local, state, and federal regulations.

When sold in quantities of less than or equal to 1 mL, or 1 g, with an Excepted Quantity Code of E1, E2, E4, or E5, this item meets the De Minimis Quantities exemption, per IATA 2.6.10. Therefore packaging does not have to be labeled as Dangerous Goods/Excepted Quantity.
**Section 15. Regulatory Information**

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Hazardous Components (Chemical Name)</th>
<th>S. 302 (EHS)</th>
<th>S. 304 RQ</th>
<th>S. 313 (TRI)</th>
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<tbody>
<tr>
<td>103-82-2</td>
<td>Benzeneacetic acid</td>
<td>No</td>
<td>No</td>
<td>No</td>
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<tr>
<th>CAS #</th>
<th>Hazardous Components (Chemical Name)</th>
<th>Other US EPA or State Lists</th>
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</thead>
<tbody>
<tr>
<td>103-82-2</td>
<td>Benzeneacetic acid</td>
<td>CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No</td>
</tr>
</tbody>
</table>

**Regulatory Information**

This SDS was prepared in accordance with 29 CFR 1910.1200 and Regulation (EC) No.1272/2008.

**Statement:**

No.1272/2008.

**Section 16. Other Information**

**Revision Date:**

01/24/2016

**Additional Information About This Product:**

No data available.

**Company Policy or Disclaimer:**

DISCLAIMER: This information is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.