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## 2-PHENYLBUTYRIC ACID, 98%

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### 1. Product Identification

**Synonyms:** alpha-phenyl butyric acid; Benzeneacetic acid, alpha-ethyl

**CAS No.:** 90-27-7

**Molecular Weight:** 164.20

**Chemical Formula:** C<sub>10</sub>H<sub>12</sub>O<sub>2</sub>

**Product Codes:** A0222

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### 2. Composition/Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
90-27-7	2-Phenylbutyric acid	98.0	201-982-5

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### 3. Hazards Identification

#### EMERGENCY OVERVIEW

**Appearance:** white crystalline powder.

**Caution!** May cause eye and skin irritation. May cause respiratory and digestive tract irritation.

**Target Organs:** None.

#### Potential Health Effects

**Eye:** May cause eye irritation.

**Skin:** May cause skin irritation.

**Ingestion:** May cause irritation of the digestive tract. The toxicological properties of this substance have not been fully investigated.

**Inhalation:** May cause respiratory tract irritation. The toxicological properties of this substance have not been fully investigated.

**Chronic:** No information found.

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### 4. First Aid Measures

**Eyes:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

**Skin:** Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

**Ingestion:** If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious

person. Get medical aid immediately.

**Inhalation:** Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

**Notes to Physician:** Treat symptomatically and supportively.

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## 5. Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

**Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, or appropriate foam.

**Flash Point:** > 110 deg C (> 230.00 deg F)

**Autoignition Temperature:** Not available.

**Explosion Limits, Lower:**Not available.

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 1; Flammability: 0; Instability: 0

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## 6. Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal. Avoid generating dusty conditions. Provide ventilation.

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## 7. Handling and Storage

**Handling:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

**Storage:** Keep container closed when not in use. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

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## 8. Exposure Controls, Personal Protection

**Engineering Controls:** Use adequate ventilation to keep airborne concentrations low.

### Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
2-Phenylbutyric acid	none listed	none listed	none listed

**OSHA Vacated PELs:** 2-Phenylbutyric acid: No OSHA Vacated PELs are listed for this chemical.

### Personal Protective Equipment

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

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## 9. Physical and Chemical Properties

**Physical State:** Crystalline powder  
**Appearance:** white  
**Odor:** None reported.  
**pH:** Not available.  
**Vapor Pressure:** Not available.  
**Vapor Density:** Not available.  
**Evaporation Rate:** Not available.  
**Viscosity:** Not available.  
**Boiling Point:** 270.0 - 272.0 deg C  
**Freezing/Melting Point:** 42.00 - 44.00 deg C  
**Decomposition Temperature:** Not available.  
**Solubility:** soluble in alcohol, ketones and esters  
**Specific Gravity/Density:** Not available.  
**Molecular Formula:** C<sub>10</sub>H<sub>12</sub>O<sub>2</sub>  
**Molecular Weight:** 164.20

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## 10. Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures.  
**Conditions to Avoid:** Incompatible materials, dust generation, strong oxidants.  
**Incompatibilities with Other Materials:** Oxidizing agents.  
**Hazardous Decomposition Products:** Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide, acrid smoke and fumes.  
**Hazardous Polymerization:** Has not been reported.

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## 11. Toxicological Information

**RTECS#:**  
CAS# 90-27-7: ET5957500  
**LD50/LC50:**  
CAS# 90-27-7:  
Oral, mouse: LD50 = 1154 mg/kg;  
.  
**Carcinogenicity:**  
CAS# 90-27-7: Not listed by ACGIH, IARC, NTP, or CA Prop 65.  
**Epidemiology:** No information available.  
**Teratogenicity:** No information available.  
**Reproductive Effects:** No information available.  
**Mutagenicity:** No information available.  
**Neurotoxicity:** No information available.  
**Other Studies:**

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## 12. Ecological Information

**Ecotoxicity:** No data available. No information available.  
**Environmental:** No information found.  
**Physical:** No information found.  
**Other:** No information available.

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## 13. Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local

hazardous waste regulations to ensure complete and accurate classification.

**RCRA P-Series:** None listed.

**RCRA U-Series:** None listed.

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## 14. Transport Information

	US DOT	Canada TDG
<b>Shipping Name:</b>	Not regulated as a hazardous material	No information available.
<b>Hazard Class:</b>		
<b>UN Number:</b>		
<b>Packing Group:</b>		

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## 15. Regulatory Information

### US FEDERAL

#### TSCA

CAS# 90-27-7 is listed on the TSCA inventory.

#### Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

#### Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

#### Section 12b

None of the chemicals are listed under TSCA Section 12b.

#### TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

#### CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

#### SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

#### Section 313

No chemicals are reportable under Section 313.

#### Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depleters.

This material does not contain any Class 2 Ozone depleters.

#### Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

#### OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

#### STATE

CAS# 90-27-7 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

#### California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

### European/International Regulations

#### European Labeling in Accordance with EC Directives

#### Hazard Symbols:

XN

#### Risk Phrases:

R 22 Harmful if swallowed.

#### Safety Phrases:

S 37 Wear suitable gloves.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S 28A After contact with skin, wash immediately with plenty of water

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**WGK (Water Danger/Protection)**

CAS# 90-27-7: No information available.

**Canada - DSL/NDSL**

CAS# 90-27-7 is listed on Canada's NDSL List.

**Canada - WHMIS**

WHMIS: Not available.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

**Canadian Ingredient Disclosure List**

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## 16. Other Information

**Product Use:**

Laboratory Reagent.

**Revision Information:**

Jan. 2008.

**Disclaimer:**

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