Section 1 - Product and Company Information

Product Name: Benzyl benzoate, minimum 99.0%
Product Number: 74630
Brand: Sigma Chemical
Company: Sigma-Aldrich
Address: 3060 Spruce Street
City, State, Zip, Country: SAINT LOUIS, MO 63103 US
Technical Phone: 314 771 7565
Fax: 800 325 5052
Emergency Phone: 414 273 3650 Ext. 5996

Section 2 - Composition/Information on Ingredient

<table>
<thead>
<tr>
<th>Substance Name</th>
<th>CAS #</th>
<th>SARA 313</th>
<th>EC no</th>
<th>Annex I Index Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzyl benzoate</td>
<td>120-51-4</td>
<td>No</td>
<td>204-402-9</td>
<td>607-085-00-9</td>
</tr>
</tbody>
</table>

Formula
C14H12O2
Synonyms
Acetin, Acacbin, Benzyl, Benzoic acid, phenethyl ester, Benzyl alcohol benzoate, Benzyl benzenecarboxylate, Benzyl benzoate, Benzyl ether benzocoe (Czech), Benzylz, Benzyl phenylazin, Celebene, Hovascillin, Perozacin, Scelencia, Uvanbio, Verzone, Vranzone

Section 3 - Hazards Identification

Emergency Overview
Harmful. If swallowed: Inhaling to eyes, respiratory system and skin.

HMIS Rating
Health: 2
Flammability: 0
Reactivity: 0

NFPA Rating
Health: 2
Flammability: 0
Reactivity: 0

For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

Oral Exposure
If swallowed, wash out mouth with water provided person is conscious. Call a physician.

Inhalation Exposure
If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

Dermal Exposure
In case of contact, immediately wash skin with soap and copious amounts of water.

Section 5 - Fire Fighting Measures

Flash Point:
316.4 °F
158 °C

Autoignition Temp:
480 °C

Extinguishing Media
Suitable:
Carbon dioxide, dry chemical powder, or appropriate foam.

Firefighting
Protective Equipment
Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Specific Hazard(s)
Emits toxic fumes under fire conditions.

Section 6 - Accidental Release Measures

Procedure to be Followed in Case of Leak or Spill
Evacuate area.

Procedure(s) of Personal Protection(s)
Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

Methods for Cleaning Up
Absorb or sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete.

Section 7 - Handling and Storage

Handling
User Exposure
Do not breathe vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

Storage
Suitable
Keep tightly closed.

Section 8 - Exposure Controls / PPE

Engineering Controls
Safety shower and eye bath. Mechanical exhaust required.

Personal Protective Equipment
Respiratory
Government approved respirator.

Hand
Compatible chemical-resistant gloves.

Eye
Chemical safety goggles.

Sigma Chemical - B0650
Page 2
Sigma-Aldrich Corporation
www.sigma-aldrich.com
Section 9 - Physical/Chemical Properties

Appearance
Physical State  |  Color
---  | ---
Clear liquid  | Colorless

Molecular Weight: 212.25 AMU

pH  | N/A
BP/BP Range  | 323 - 324 °C
MP/MP Range  | 17 °C
Freezing Point  | N/A
Vapor Pressure  | 1 mmHg
Vapor Density  | N/A
Saturated Vapor Conc.  | N/A
SG/Density  | 1.119 g/cm³
Bulk Density  | N/A
Odor Threshold  | N/A
Volatile%  | N/A
VOC Content  | N/A
Water Content  | N/A
Solvent Content  | N/A
Evaporation Rate  | N/A
Viscosity  | N/A
Partition Coefficient  | Log Kow: 4.00
Decomposition Temp.  | N/A
Flash Point °F  | 316.4 °F
Flash Point °C  | 158 °C
Explosion Limits  | N/A

Flammability  | N/A
Autoignition Temp  | 480 °C
Refractive Index  | 1.569
Solubility  | N/A

N/A = not available

Section 10 - Stability and Reactivity

Stability
Stable.

Materials to Avoid
Strong oxidizing agents.

Hazardous Decomposition Products
Hazardous Decomposition Products
Carbon monoxide, Carbon dioxide.

Section 11 - Toxicological Information

Hazardous Polymerization
Hazardous Polymerization
Will not occur.

Route of Exposure
- Skin Contact
  Causes skin irritation.
- Skin Absorption
  May be harmful if absorbed through the skin.
- Eye Contact
  Causes eye irritation.
- Inhalation
  May be harmful if inhaled.
- Ingestion
  Harmful if swallowed.

Signs and Symptoms of Exposure
Exposure can cause: Cardiovascular effects. Muscle cramps/spasms. Ataxia.

RTECS Number: DG4200000

Toxicity Data
- Oral - Rat: 1700 UL/KG (LD50)
- Skin - Rat: 4 ML/KG (LD50)
- Oral - Mouse: 1400 UL/KG (LD50)
- Intraperitoneal - Mouse: >500 MG/KG (LD50)
- Oral - Dog: >22440 mg/kg (LD50)
- Oral - Cat: 2240 mg/kg (LD50)
  Behavioral: Muscle weakness.
  Gastrointestinal: Changes in structure or function of salivary glands.
- Oral - Rabbit: 1680 mg/kg (LD50)
- Skin - Rabbit: 4000 mg/kg (LD50)
- Oral - Guinea pig: 1 ML/KG (LD50)

Section 12 - Ecological Information

Acute Ecotoxicity Tests
Test Type
LC50 Fish
Value:
0.29 mg/l

Section 13 - Disposal Considerations

Appropriate Method of Disposal of Substance or Preparation
Contact a licensed professional waste disposal service to dispose of this material.
Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.
Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information

DOT
Proper Shipping Name: None

Sigma Chemical - B6630
Page 4
Sigma-Aldrich Corporation
www.sigma-aldrich.com
Section 15 - Regulatory Information

EU Directives Classification
Symbol of Danger: Xn
Indication of Danger
Harmful.
R: 22
Harmful if swallowed.
Safety Statements
S: 25
Avoid contact with eyes.

US Classification and Label Text
Indication of Danger
Harmful.
Risk Statements
Harmful if swallowed. Imitating to eyes, respiratory system and skin.
Safety Statements
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

United States Regulatory Information
SARA Listed: No
TSCA Inventory Item: Yes

Canada Regulatory Information
WHMIS Classification
This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.
DSL: Yes
NDSL: No

Section 16 - Other Information

Disclaimer
For R&D use only. Not for drug, household or other uses.

Warranty
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc. shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2005 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.