Material Safety Data Sheet
2-Phenylphenol, 99+

MSDS# 82669

Section 1 - Chemical Product and Company Identification

MSDS Name: 2-Phenylphenol, 99+
Catalog Numbers: AC130760000, AC130760050, AC130765000
Synonyms: 2-Biphenylol; Biphenyl, 2-hydroxy-; (1,1'-Biphenyl)-2-ol; o-Biphenylol; 2-Hydroxybiphenyl; o-Hydroxydiphenyl; o-Hydroxybiphenyl; 2-Hydroxybiphenyl; Orthohydroxybiphenyl; Orthophenylphenol; Orthoxenol; Phenol, o-phenyl-; o-Phenylphenol; o-Xenol

Company Identification: Acros Organics BVBA
Janssen Pharmaceuticaan 3a
2440 Geel, Belgium

Company Identification: (USA)
Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

For information in the US, call: 800-ACROS-01
For information in Europe, call: +32 14 57 52 11
Emergency Number, Europe: +32 14 57 52 99
Emergency Number US: 201-796-7100
CHEMTREC Phone Number, US: 800-424-9300
CHEMTREC Phone Number, Europe: 703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#: 90-43-7
Chemical Name: 2-Phenylphenol
%: 99+
EINECS#: 201-993-5

Hazard Symbols: XI

Risk Phrases: 36/38

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Warning! The toxicological properties of this material have not been fully investigated. This substance has caused adverse reproductive and fetal effects in animals. Causes eye, skin, and respiratory tract irritation. Target Organs: Kidneys.

Potential Health Effects

Eye: Causes severe eye irritation and possible burns.

Skin: Causes moderate skin irritation.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

Inhalation: Inhalation of dust may cause respiratory tract irritation. Causes irritation of the mucous membrane and upper respiratory tract.
Chronic: May cause reproductive and fetal effects. Laboratory experiments have resulted in mutagenic effects.

Section 4 - First Aid Measures

Eyes: Immediately 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. Immediately 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. Wash mouth out with water.

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:

Section 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 chemical foam.

Autoignition Temperature: > 520 deg C (> 968.00 deg F)
Flash Point: 123 deg C (253.40 deg F)

Explosion Limits:
Lower: 1.40 vol %
Upper: 9.50 vol %

NFPA Rating: health: 3; flammability: 1; instability: 0;

Section 6 - Accidental Release Measures

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

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use only in a well-ventilated area. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Do not breathe dust or fumes.

Storage: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 - Exposure Controls, Personal Protection

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Phenylphenol</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
</tbody>
</table>

OSHA Vacated PELs: 2-Phenylphenol: None listed

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

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.

Section 9 - Physical and Chemical Properties

Physical State: Crystals
Color: white
Odor: mild odor - characteristic odor
pH: Not available
Vapor Pressure: 7 mm Hg @ 140°C
Vapor Density: Not available
Evaporation Rate: Not available
Viscosity: 2.4 mPas 100. deg C
Boiling Point: 282 deg C @ 760.00mm Hg (539.60°F)
Freezing/Melting Point: 57.0 - 59.0 deg C
Decomposition Temperature: Not available
Solubility in water: Insoluble
Specific Gravity/Density: 1.2130g/cm3
Molecular Formula: C12H10O
Molecular Weight: 170.21

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: Incompatible materials, dust generation, excess heat.
Incompatibilities with Other Materials: Strong oxidizing agents, strong bases.
Hazardous Decomposition Products: Nitrogen oxides, carbon monoxide, carbon monoxide, carbon dioxide.
Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#: CAS# 90-43-7: DV5775000
RTECS:
CAS# 90-43-7: Draize test, rabbit, eye: 50 ug/24H Severe;
Draize test, rabbit, skin: 250 mg;
Draize test, rabbit, skin: 20 mg/24H Moderate;
Oral, mouse: LD50 = 1050 mg/kg;
Oral, rat: LD50 = 2 gm/kg;
Oral, rat: LD50 = 2700 mg/kg;

Carcinogenicity: 2-Phenylphenol - California: carcinogen, initial date 8/4/00 IARC: Group 3 (not classifiable)
Other: Standard Draize Test(Skin, rabbit) = 20 mg/24H (Moderate) Standard Draize Test: Administration into the eye (rabbit) = 50 ug/24H (Severe).

Section 12 - Ecological Information

Fish: Fathead Minnow: LC50 = 13.2 mg/L; 96 Hr; Flow-through at 25.0-27.8 C (pH 6.9-7.7)
Fish: Bluegill/Sunfish: LC50 = 6 mg/L; 96 Hr; Unspecified
Water flea Daphnia: EC50 = 15 mg/L; 48 Hr; Unspecified (6-24 hr old)
Bacteria: Phytobacterium phosphoreum: EC50 = 2.05 mg/L; 5 min; Microtox test

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

US DOT
Shipping Name: Not regulated as a hazardous material
Hazard Class:
UN Number:
Packing Group:
Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives
- Hazard Symbols: XI
- Risk Phrases:
  - R 36/38 Irritating to eyes and skin.
- Safety Phrases:
  - S 22 Do not breathe dust.

WGK (Water Danger/Protection)
- CAS# 90-43-7: 2

Canada
- CAS# 90-43-7 is listed on Canada's DSL List
- Canadian WHMIS Classifications: D2B
- 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.
- CAS# 90-43-7 is listed on Canada's Ingredient Disclosure List

US Federal

TSCA
- CAS# 90-43-7 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date: 2/15/1999
Revision #5 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantibility 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. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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