

Material Safety Data Sheet Biphenyl

MSDS# 15418

Section 1 - Chemical Product and Company Identification

MSDS Name: Biphenyl

Catalog Numbers: AC106250000, AC106250010, AC106252500

Diphenyl. Synonyms:

Acros Organics BVBA Company Identification:

Janssen Pharmaceuticalaan 3a

2440 Geel, Belgium

**Acros Organics** 

Company Identification: (USA) 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#: 92-52-4 Chemical Name: Biphenyl %: 99

EINECS#: 202-163-5

Hazard Symbols: XI N



Risk Phrases:



36/37/38 50/53

Section 3 - Hazards Identification

**EMERGENCY OVERVIEW** 

Warning! Causes eye, skin, and respiratory tract irritation. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Target Organs: Respiratory system, eyes, skin.

Potential Health Effects

Eye: Causes eye irritation.

Skin: Causes skin irritation. May be harmful if absorbed through the skin.

May cause irritation of the digestive tract. May be harmful if swallowed. Ingestion:

Causes respiratory tract irritation. May be harmful if inhaled. Inhalation:

Chronic: No information found.

Section 4 - First Aid Measures

Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower Eyes:

eyelids. Get medical aid.

Get medical aid. Immediately flush skin with plenty of water for at least 15 minutes while removing Skin:

contaminated clothing and shoes.

Do not induce vomiting. Get medical aid. Ingestion:

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If Inhalation:

breathing is difficult, give oxygen. Get medical aid.

Notes to

Treat symptomatically and supportively.

Physician:

Section 5 - Fire Fighting Measures

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH General Information:

(approved or equivalent), and full protective gear.

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

Autoignition Temperature: 540 deg C ( 1,004.00 deg F)

Flash Point: 113 deg C (235.40 deg F)

Explosion Limits: 0.6 vol % Lower:

Explosion Limits: 5.8 vol % Upper:

NFPA Rating: health: 2; flammability: 1; instability: 0;

Section 6 - Accidental Release Measures

General

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Information:

Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty

conditions. Provide ventilation. Do not let this chemical enter the environment.

Section 7 - Handling and Storage

Handling: Use only in a well-ventilated area. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and

clothing. Avoid ingestion and inhalation.

Storage: Store in a cool, dry place. Store in a tightly closed container.

Section 8 - Exposure Controls, Personal Protection

Chemical Name	+   ACGIH 	NIOSH	
Biphenyl	0.2 ppm		0.2 ppm TWA; 1
			mg/m3 TWA

OSHA Vacated PELs: Biphenyl: 0.2 ppm TWA; 1 mg/m3 TWA

**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

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face Eyes:

protection regulations in 29 CFR 1910.133 or European Standard EN166.

Wear appropriate protective gloves to prevent skin exposure. Skin:

Clothing: Wear appropriate protective clothing to prevent skin exposure.

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or Respirators:

European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties

Physical State: Crystals

Color: white - faint yellow

Odor: pleasant odor - butter-like

pH: Not available

Vapor Pressure: 9.46 mm Hg @ 115 deg C

Vapor Density: 5.31

Evaporation Rate: Not available

Viscosity: Not available

Boiling Point: 255 deg C (491.00°F)

Freezing/Melting Point: 68.5 - 71 deg C

Decomposition Temperature: Not available

Solubility in water: Insoluble

Specific Gravity/Density: 0.991

Molecular Formula: C12H10 Molecular Weight: 154.21

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Incompatible materials, dust generation.

Incompatibilities with Other Materials Oxidizing agents.

Hazardous Decomposition Products

Carbon monoxide, carbon dioxide.

Hazardous Polymerization Will not occur.

Section 11 - Toxicological Information

RTECS#: CAS# 92-52-4: DU8050000

RTECS:

CAS# 92-52-4: Draize test, rabbit, eye: 100 mg Mild;

Draize test, rabbit, skin: 500 uL/24H Severe;

LD50/LC50: Oral, mouse: LD50 = 1900 mg/kg;

Oral, rabbit: LD50 = 2400 mg/kg; Oral, rat: LD50 = 2140 mg/kg; Skin, rabbit: LD50 = >5010 mg/kg;

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Carcinogenicity: Biphenyl - IARC: Group 2A carcinogen

Other: See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Fish: Fathead Minnow: LC50 = 1.2-3.3 mg/L; 96 Hr; Flow-through at 10 C

Ecotoxicity: Water flea Daphnia: EC50 = 0.63-3.91 mg/L; 48 Hr; (< 24 hrs old) Static at 22.2 C (pH 7.9-8.2)

Bacteria: Phytobacterium phosphoreum: EC50 = 1.9-3.3 mg/L; 5,15,30 min; Microtox test at 15C

Other: Harmful to aquatic life in very low concentrations. Do not empty into drains.

Section 13 - Disposal Considerations

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

Section 14 - Transport Information

US DOT

Shipping Name: Biphenyl Biphenyl

Hazard Class: 9

UN Number: UN3077 Packing Group: III Canada TDG

Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, N.O (Biphenyl)

Hazard Class: 9

UN Number: UN3077 Packing Group: III

USA RQ: CAS# 92-52-4: 100 lb final RQ; 45.4 kg final RQ

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XI N

Risk Phrases:

R 36/37/38 Irritating to eyes, respiratory system and skin.

R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases:

S 23 Do not inhale gas/fumes/vapour/spray.

S 60 This material and its container must be disposed of as hazardous waste.

S 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

WGK (Water Danger/Protection)

CAS# 92-52-4: 2

Canada

CAS# 92-52-4 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# 92-52-4 is listed on Canada's Ingredient Disclosure List

**US** Federal

**TSCA** 

CAS# 92-52-4 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date: 5/18/1999 Revision #8 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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