Material Safety Data Sheet
Biphenyl

MSDS\# 15418

## Section 1 - Chemical Product and Company Identification

MSDS Name:
Catalog Numbers:
Synonyms:

Company Identification:

Company Identification: (USA)

For information in the US, call:
For information in Europe, call:
Emergency Number, Europe:
Emergency Number US:
CHEMTREC Phone Number, US:
CHEMTREC Phone Number, Europe:

Acros Organics BVBA
Janssen Pharmaceuticalaan 3a
2440 Geel, Belgium
Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410
800-ACROS-01
+32 14575211
+32 14575299
201-796-7100
800-424-9300
703-527-3887

Section 2 - Composition, Information on Ingredients

| Chemical Name: | Biphenyl |
| :--- | :--- |
| \%: | 99 |
| EINECS\#: | $202-163-5$ |

Hazard Symbols:


Risk Phrases:

XI N


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: $\quad$ Causes skin irritation. May be harmful if absorbed through the skin.
Ingestion: May cause irritation of the digestive tract. May be harmful if swallowed.
Inhalation: Causes respiratory tract irritation. May be harmful if inhaled.
Chronic: No information found.

## 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. contaminated clothing and shoes.
Ingestion: Do not induce vomiting. Get medical aid.
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.

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

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        Autoignition \(540 \mathrm{deg} \mathrm{C}(1,004.00 \mathrm{deg} \mathrm{F})\)
        Flash Point: 113 deg C ( 235.40 deg F)
Explosion Limits:
\(0.6 \mathrm{vol} \%\)
    Lower:
Explosion Limits:
        Upper: 5.8 vol \%
        Upper:
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    NFPA Rating: health: 2 ; flammability: 1 ; instability: 0 ;
                    Section 6 - Accidental Release Measures
    General
Information:
Spills/Leaks:

Use proper personal protective equipment as indicated in Section 8.
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


OSHA Vacated PELs: Biphenyl: 0.2 ppm TWA; $1 \mathrm{mg} / \mathrm{m} 3$ 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
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 - faint yellow
> Odor: pleasant odor - butter-like


Section 12 - Ecological Information
Fish: Fathead Minnow: LC50 $=1.2-3.3 \mathrm{mg} / \mathrm{L} ; 96 \mathrm{Hr}$; Flow-through at 10 C
Ecotoxicity: Water flea Daphnia: EC50 $=0.63-3.91 \mathrm{mg} / \mathrm{L} ; 48 \mathrm{Hr} ;(<24 \mathrm{hrs}$ old) Static at $22.2 \mathrm{C}(\mathrm{pH} 7.9-8.2)$ Bacteria: Phytobacterium phosphoreum: EC50 $=1.9-3.3 \mathrm{mg} / \mathrm{L} ; 5,15,30 \mathrm{~min}$; Microtox test at 15 C
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

## 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.

