

DATE: 07/29/05 ACCT: 085511001 PAGE: 1
INDEX: D52097742 CAT NO: AC150740010 PO NBR: 29560D

**** MATERIAL SAFETY DATA SHEET ****

Diphenylamine, 99%
95565

**** SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION ****

MSDS Name: Diphenylamine, 99%
Catalog Numbers:
AC150740000, AC150740010, AC150740050
Synonyms:
N-Phenylamine, Anilinobenzene, N-Phenylbenzeneamine, DPA
Company Identification (Europe): Acros Organics BVBA
Janssen Pharmaceuticaal 3a
2440 Geel, Belgium
Company Identification (USA): Acros Organics
One Reagent Lane
Fairlawn, NJ 07410

For information in North America, call: 800-ACROS-01
For information in Europe, call: 0032(0) 14575211
For emergencies in the US, call CHEMTREC: 800-424-9300
For emergencies in Europe, call: 0032(0) 14575299

**** SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS ****

CAS#	Chemical Name	%	EINECS#
122-39-4	Diphenylamine	99.0	204-539-4

Hazard Symbols: T N
Risk Phrases: 23/24/25 33 50/53

**** SECTION 3 - HAZARDS IDENTIFICATION ****

EMERGENCY OVERVIEW

Appearance: colorless to grayish solid.
Caution! May cause allergic skin reaction. Light sensitive. May be absorbed through intact skin. May cause methemoglobinemia. Causes eye and skin irritation. Causes digestive and respiratory tract irritation.
Target Organs: Kidneys, central nervous system, liver, red blood cells, bladder.

Potential Health Effects

Eye:
Causes eye irritation.
Skin:
Causes skin irritation. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material.
Ingestion:
May cause irritation of the digestive tract. May cause effects similar to those of acute inhalation.
Inhalation:
Inhalation of vapor may cause respiratory tract irritation. May cause methemoglobinemia, cyanosis, convulsions, tachycardia, dyspnea (labored breathing), and death. May cause adverse central nervous system effects including headache, convulsions, and possible death. May cause bladder injury and hypertension.
Chronic:
Prolonged or repeated skin contact may cause dermatitis. May cause reproductive and fetal effects. There is a danger of cumulative effects.

**** SECTION 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.
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. Destroy contaminated shoes.
Ingestion:
Never give anything by mouth to an unconscious person. Get medical aid immediately. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or 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:
Absorption of this product into the body may cause cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood). Moderate degrees of cyanosis need to be treated only by supportive measures: bed rest and oxygen inhalation. For methemoglobinemia, administer oxygen alone or with Methylene blue depending on the methemoglobinemia concentration in the blood. Cleansing of the entire contaminated area of the body is of utmost importance.

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**** 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. This material in sufficient quantity and reduced particle size is capable of creating a dust explosion.
Extinguishing Media:
Water or foam may cause frothing. In case of fire, use carbon dioxide, dry chemical powder or appropriate foam.
Autoignition Temperature: 634 deg C (1,173.20 deg F)
Flash Point: 153 deg C (307.40 deg F)
Explosion Limits, lower: Not available.
Explosion Limits, upper: Not available.
NFPA Rating: (estimated) 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:
Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Do not ingest or inhale. Store protected from light.

Storage:
Keep away from sources of ignition. Do not store in direct sunlight. Store in a tightly closed container. Keep from contact with oxidizing materials. Store in a cool, dry, well-ventilated area away from incompatible substances. Store protected from light.

**** SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION ****

Engineering Controls:
Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits			
Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Diphenylamine	10 mg/m3	10 mg/m3 TWA	none listed

OSHA Vacated PELs:
Diphenylamine:
10 mg/m3 TWA

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:
Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

**** SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ****

Physical State: Solid
Color: colorless to grayish
Odor: floral-like
pH: Not available.
Vapor Pressure: 1 mm Hg @ 108 C
Evaporation Rate: 5.82
Viscosity: Negligible.
Boiling Point: Not available.
Freezing/Melting Point: 576 deg F
Decomposition Temperature: 129 - 131F
Solubility in water: Not available.
Negligible in water.

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Specific Gravity/Density: 1.160
Molecular Formula: C12H11N
Molecular Weight: 169.0837

**** SECTION 10 - STABILITY AND REACTIVITY ****

Chemical Stability:
Stable.

Conditions to Avoid:

Incompatible materials, light, ignition sources, excess heat.
Incompatibilities with Other Materials:
Oxidizing agents, strong acids, isocyanates, hexachloromelamine,
organic anhydrides, aldehydes, trichloromelamine.
Hazardous Decomposition Products:
Nitrogen oxides, carbon monoxide, carbon dioxide.
Hazardous Polymerization: Has not been reported.

**** SECTION 11 - TOXICOLOGICAL INFORMATION ****

RTECS#:
CAS# 122-39-4: JJ7800000
LD50/LC50:
CAS# 122-39-4: Oral, mouse: LD50 = 1230 mg/kg; Oral, rat: LD50 =
1120 mg/kg.
Carcinogenicity:
Diphenylamine -
ACGIH: A4 - Not Classifiable as a Human Carcinogen
Epidemiology:
No information available.
Teratogenicity:
No information available.
Reproductive Effects:
No information available.
Neurotoxicity:
No information available.
Mutagenicity:
No information available.
Other Studies:
No data available.

**** SECTION 12 - ECOLOGICAL INFORMATION ****

Ecotoxicity:
Bacteria: Phytobacterium phosphoreum: EC50 =4.77 mg/L; 5,15,30
minutes; Microtox test

**** SECTION 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.

**** SECTION 14 - TRANSPORT INFORMATION ****

US DOT
Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
Hazard Class: 9
UN Number: 3077
Packing Group: III
Canadian TDG
No information available.

**** SECTION 15 - REGULATORY INFORMATION ****

US FEDERAL
TSCA

CAS# 122-39-4 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.

SARA

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.
SARA Codes
CAS # 122-39-4: acute, chronic.
Section 113

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This material contains Diphenylamine (CAS# 122-39-4, 99 0%), which is
subject to the reporting requirements of Section 313 of SARA Title
III and 40 CFR Part 372.

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

Diphenylamine can be found on the following state right to know
lists: California, New Jersey, Pennsylvania, Minnesota,
Massachusetts.
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: T N
Risk Phrases:

R 23/24/25 Toxic by inhalation, in contact with skin
and if swallowed.
R 33 Danger of cumulative effects.
R 50/53 Very toxic to aquatic organisms; may cause
long-term adverse effects in the aquatic environment.

Safety Phrases:

S 28 After contact with skin, wash immediately
with...
S 36/37 Wear suitable protective clothing and
gloves.
S 45 In case of accident or if you feel unwell, seek
medical advice immediately (show the label where
possible).
S 60 This material and/or 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# 122-39-4: 3
United Kingdom Occupational Exposure Limits
CAS# 122-39-4: OES-United Kingdom, TWA 10 mg/m3 TWA
CAS# 122-39-4: OES-United Kingdom, STEL 20 mg/m3 STEL
United Kingdom Maximum Exposure Limits

Canada

CAS# 122-39-4 is listed on Canada's DSL List.
This product has a WHMIS classification of D2B.
CAS# 122-39-4 is listed on Canada's Ingredient Disclosure List.

Exposure Limits

CAS# 122-39-4: OEL-AUSTRALIA:TWA 10 mg/m3
OEL-BELGIUM:TWA 10 mg/m3
OEL-CZECHOSLOVAKIA:TWA 5 mg/m3;STEL 10 mg/m3 JAN9
OEL-DENMARK:TWA 5 mg/m3
OEL-FRANCE:TWA 10 mg/m3
OEL-THE NETHERLANDS:TWA 10 mg/m3
OEL-SWITZERLAND:TWA 10 mg/m3
OEL-UNITED KINGDOM:TWA 10 mg/m3;STEL 20 mg/m3
OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV
OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

**** SECTION 16 - ADDITIONAL INFORMATION ****

MSDS Creation Date: 6/16/1999 Revision #2 Date: 3/18/2003

The information above is believed to be accurate and represents the best
information currently available to us. However, we make no warranty of
merchantability 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 way 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.