



## MATERIAL SAFETY DATA SHEETS

25

Amino diphenyl

### 1. CHEMICAL IDENTITY

**Chemical Name :** Amino diphenyl

**Chemical Classification:** Toxic

**Trade Name :**

**Synonyms:** p-Aminodiphenyl, p-Aminobiphenyl, 4-Biphenylamine, p-Xenylamine, (1,1'-Biphenyl)-4-amine, 4-Aminodiphenyl

**Formula :** C<sub>12</sub>H<sub>11</sub>N

**CAS No:** 92-67-1

**UN No:** 2811

#### Regulated Identification

**Shipping Name :** Poisonous Solid

**Hazchem Code :** 2X

**Codes / Label :** Class 6.1, Toxic

**Hazardous Waste ID No :** 9

HAZARDOUS INGREDIENTS	C.A.S. No.	HAZARDOUS INGREDIENTS	C.A.S. No.
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1 Amino diphenyl

92-67-1

3

2

4

### 2. PHYSICAL / CHEMICAL DATA

**Boiling Pt. °C:** 302

**Physical State:** Solid crystals

**Appearance:** Colorless to yellowish-brown crystals or light brown solid.

**Melting Pt °C:** 53.5

**Vapour Pressure @ 35°C mmHg:** 5.79X10<sup>-4</sup> mm Hg @ 25 °C

**Odour:** Floral odor

**Vapour Density(Air =1):** 5.8

**Solubility in water at 30°C g/100ml:** 2 g/L (20°C). Readily soluble in hot water.

**Others:** Soluble in alcohol, benzene and chloroform.

**Specific Gravity (Water =1 ):** 1.160 at 20°C

**pH :**

### 3. FIRE / EXPLOSION HAZARD DATA

**Flammability :** Yes

**LEL:** 0.7

**Flash Point °C in OC:**

**TDG Flammability:**

**UEL:** 5.5

**Flash Point °C in CC:** 147

**Autoignition Temperature °C :** 450

**Explosion sensitivity to impact:**

**Explosion sensitivity to static Electricity:**

**Hazardous Combustion Products :** When heated to decomposition it emits Nox

**Hazardous Polymerization :**

**Combustible Liquid:** No

**Explosive Material:** No

**Corrosive Material** No

**Flammable Material:** Yes

**Oxidiser :** No

**Others:**

**Pyrophoric Material:** No

**Organic Peroxide :** No

### 4. REACTIVITY DATA

**Chemical Stability :** Stable but sensitive to light and air.

**Incompatibility with other material :** Incompatible with acids and acid anhydrides May react with strong oxidizing agents.

**Reactivity :**

**Hazardous** :  
**Reaction Products**

## 5. HEALTH HAZARD DATA

**Routes of entry:** Inhalation, ingestion, skin and eyes

### Effects of Exposure / Symptoms:

4-Aminodiphenyl (both solid and vapour) is highly toxic and readily absorbed through skin. It causes bladder cancer in humans. Symptoms of poisoning include nausea and vomiting. Besides causing damage to bladder it can affect liver, kidneys and blood and can cause bone marrow depression and cancer.

### Emergency Treatment :

**Inhalation:** Remove the victim to fresh air. Proper respiratory protection must be worn by the rescuers.

**Skin:** Flood all areas of the body with water.

**Eyes:** Irrigate eyes with water for at least 15 mins.

**Ingestion:** If convulsions are not present, induce vomiting.

**LD50 (oral-rat) mg/kg:** 500 mg/kg

**STEL:**

**LC50 (rat) mg/kg:**

**Odour Threshold:**

**Permissible  
Exposure Limit:**

**TLV (ACGIH) :**

NFPA Hazard	Health	Flammability	Reactivity	Special
Signals	2	1	0	

## 6. PREVENTIVE MEASURES

**Personal Protective Equipment :** Full body impervious clothing along with respirator should be used.

**Handling :** Handling should occur in a chemical fume hood.

**Storage :** To be stored in a cool, dry place in a tightly capped container. To be protected from light.

**Precautions :** This chemical should be handled in hermetically sealed container in such a way that there is no escape of this chemical to the work environment.

## 7. EMERGENCY / FIRST AID MEASURES

### FIRE:

**Fire Extinguishing Media :** Water spray, mist, dry chemical.

**Special Procedure :**

**Unusual Hazards :**

### EXPOSURE: First Aid Measures:

**Inhalation:** Remove the victim to fresh air. Proper respiratory protection must be worn by the rescuers.

**Skin:** Flood all areas of the body with water.

**Eyes:** Irrigate eyes with water for at least 15 mins.

**Ingestion:** If convulsions are not present, induce vomiting.

**Antidotes / Dosages:**

### SPILLS :

**Steps To Be Taken :** Dampen spilled material with alcohol to avoid dust, then transfer to a container. Wash surfaces with detergent and water.

**Waste Disposal Method:** Seal all wastes in vapour-tight plastic bags for eventual disposal.

## 8. ADDITIONAL INFORMATION / REFERENCES

4-Aminodiphenyl is a confirmed human carcinogen and causes bladder tumour. No exposure to this chemical is permitted.

## 9. MANUFACTURERS / SUPPLIERS DATA

<b>NAME OF FIRM :</b>	<b>Contact person</b>
<b>MAILING ADDRESS :</b>	<b>in Emergency :</b>
<b>TELEPHONE / TELEX NOS :</b>	<b>Local Bodies involved :</b>
<b>TELEGRAPHIC ADDRESS :</b>	<b>Standard Packing :</b>
<b>OTHERS :</b>	<b>Trem Card Details / Ref :</b>

## 10. DISCLAIMER

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