

# 2,6-XYLIDINE

1519  
April 2007

CAS No: 87-62-7  
RTECS No: ZE9275000  
UN No: 1711  
EC No: 612-161-00-X

2,6-Dimethylaniline  
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1-Amino-2,6-dimethylbenzene  
2-Amino-1,3-xylene  
 $C_8H_{11}N$  /  $(CH_3)_2C_6H_3NH_2$   
Molecular mass: 121.2

| TYPES OF HAZARD/ EXPOSURE | ACUTE HAZARDS/SYMPTOMS   | PREVENTION  | FIRST AID/FIRE FIGHTING   |
|---------------------------|--|---|---|
| <b>FIRE</b>               | Combustible. Gives off irritating or toxic fumes (or gases) in a fire.                         | NO open flames.   | Water spray, carbon dioxide, foam, powder.  |
| <b>EXPLOSION</b>          | Above 91/C explosive vapour/air mixtures may be formed.  | Above 91/C use a closed system, ventilation.                                  |   |
| <b>EXPOSURE</b>           |  | <b>AVOID ALL CONTACT!</b>   |   |
| <b>Inhalation</b>         | Dizziness. Drowsiness. Headache. Nausea.   | Ventilation, local exhaust, or breathing protection.                          | Fresh air, rest. Refer for medical attention.   |
| <b>Skin</b>               | MAY BE ABSORBED! (See Ingestion)   | Protective gloves. Protective clothing.                                       | Remove contaminated clothes. Rinse and then wash skin with water and soap. Refer for medical attention. |
| <b>Eyes</b>               |  | Safety spectacles or eye protection in combination with breathing protection. | Rinse with plenty of water (remove contact lenses if easily possible).                                  |
| <b>Ingestion</b>          | Blue lips or fingernails. Blue skin. Dizziness. Drowsiness. Headache. Nausea. Unconsciousness. | Do not eat, drink, or smoke during work.                                      | Rinse mouth. Refer for medical attention.   |

| SPILLAGE DISPOSAL  | PACKAGING & LABELLING   |
|--|---|
| Personal protection: filter respirator for organic gases and vapours adapted to the airborne concentration of the substance. Chemical protection suit. Do NOT let this chemical enter the environment. Collect leaking liquid in sealable containers. Absorb remaining liquid in sand or inert absorbent and remove to safe place. | <p><b>EU classification</b> Do not transport with food and feedstuffs.</p> <p>Xn Symbol<br/>N Symbol<br/>R: 20/21/22-37/38-40-51/53<br/>S: (2-)23-25-36/37-61<br/>Note: C</p> <p><b>UN classification</b><br/>UN Hazard Class: 6.1<br/>UN Pack Group: II</p> <p><b>GHS classification</b><br/>Signal: Warning<br/>Excl mark-Health haz<br/>Combustible liquid<br/>Harmful if swallowed<br/>Suspected of causing cancer<br/>May cause drowsiness or dizziness<br/>May cause damage to blood<br/>May cause damage to blood and liver through prolonged or repeated exposure</p> |

| EMERGENCY RESPONSE   | SAFE STORAGE   |
|--|--|
| Transport Emergency Card: TEC (R)-61S1711-L<br>NFPA Code: H3; F0; R0 | Separated from strong oxidants, acids, acid anhydrides, acid chlorides, hypochlorites, halogens, food and feedstuffs. Well closed. Store in an area without drain or sewer access. |

### IMPORTANT DATA

**Physical State; Appearance**

YELLOW LIQUID, WITH CHARACTERISTIC ODOUR. TURNS BROWN ON EXPOSURE TO AIR.

**Physical dangers**

The vapour is heavier than air.

**Chemical dangers**

The substance decomposes on burning producing toxic and corrosive fumes including nitrogen oxides. Reacts violently with strong oxidants. Reacts with hypochlorites forming explosive chloroamines. Reacts with acids, acid anhydrides, acid chlorides and halogens. Attacks plastic and rubber.

**Occupational exposure limits**

TLV not established. See Notes.

MAK: skin absorption (H); Carcinogen category: 2; (DFG 2006).

**Routes of exposure**

The substance can be absorbed into the body in hazardous amounts by inhalation of its aerosol, through the skin and by ingestion.

**Inhalation risk**

A harmful contamination of the air will be reached slowly on evaporation of this substance at 20/C; on spraying or dispersing, however, much faster.

**Effects of short-term exposure**

Exposure at high levels could cause lowering of consciousness.

Exposure at high levels may result in the formation of methaemoglobin.

The effects may be delayed. Medical observation is indicated.

**Effects of long-term or repeated exposure**

The substance may have effects on the blood, resulting in anaemia. The substance may have effects on the liver. This substance is possibly carcinogenic to humans.

### PHYSICAL PROPERTIES

Boiling point: 215/C

Melting point: 11.2/C

Relative density (water = 1): 0.98

Solubility in water, g/100 ml at 20/C: 0.7

Vapour pressure, kPa at 20/C: 0.02

Relative vapour density (air = 1): 4.2

Flash point: 91/C

Auto-ignition temperature: 520/C

Explosive limits, vol% in air: 1.3-6.9

Octanol/water partition coefficient as log Pow: 1.84

### ENVIRONMENTAL DATA

This substance may be hazardous in the environment; special attention should be given to aquatic organisms.

### NOTES

Do NOT take working clothes home.

Depending on the degree of exposure, periodic medical examination is suggested.

Specific treatment is necessary in case of poisoning with this substance; the appropriate means with instructions must be available.

TLV only established for mixed isomers, see ICSC 0600.

See also ICSC 0600 (Xylidine, mixed isomers), 0451 (2,3-Xylidine), 1562 (2,4-Xylidine), 0453 (3,4-Xylidine), 1686 (2,5-Xylidine), 1687 (3,5-Xylidine).

Card has been partially updated in January 2008: see GHS classification.

### ADDITIONAL INFORMATION

**LEGAL NOTICE**

Neither the EC nor the IPCS nor any person acting on behalf of the EC or the IPCS is responsible for the use which might be made of this information