

2,3-XYLIDINE

0451
April 2007

CAS No: 87-59-2

RTECS No: ZE8750000

UN No: 1711

EC No: 612-027-00-0

2,3-Dimethylaniline

2,3-Dimethylbenzeneamine

1-Amino-2,3-dimethylbenzene

3-Amino-o-xylene

3-Amino-1,2-xylene

C₈H₁₁N / (CH₃)₂C₆H₃NH₂

Molecular mass: 121.2

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
FIRE	Combustible. Gives off irritating or toxic fumes (or gases) in a fire.	NO open flames.	Water spray, carbon dioxide, foam, powder.
EXPLOSION	Above 96/C explosive vapour/air mixtures may be formed.	Above 96/C use a closed system, ventilation.	
EXPOSURE		STRICT HYGIENE!	
Inhalation	Dizziness. Drowsiness. Headache. Nausea.	Ventilation, local exhaust, or breathing protection.	Fresh air, rest. Refer for medical attention.
Skin	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.
Eyes		Safety spectacles or eye protection in combination with breathing protection.	Rinse with plenty of water (remove contact lenses if easily possible).
Ingestion	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

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.

PACKAGING & LABELLING

EU classification

T Symbol

N Symbol

R: 23/24/25-33-51/53

S: (1/2)-28-36/37-45-61

Note: C

UN classification

UN Hazard Class: 6.1

UN Pack Group: II

GHS classification

Signal: Warning

Excl mark-Health haz-Enviro

Harmful if swallowed

May cause drowsiness or dizziness

May cause damage to blood

May cause damage to blood through

prolonged or repeated exposure

Very toxic to aquatic life

Do not transport with food and feedstuffs.

EMERGENCY RESPONSE

Transport Emergency Card: TEC (R)-61S1711-L
NFPA Code: H3; F1; R0

SAFE STORAGE

Separated from strong oxidants, acids, acid anhydrides, acid chlorides, hypochlorites, halogens, food and feedstuffs. Well closed. Provision to contain effluent from fire extinguishing. Store in an area without drain or sewer access.

IPCS

International
Programme on
Chemical Safety



Prepared in the context of cooperation between the International Programme on Chemical Safety and the European Commission ©
IPCS 2006

SEE IMPORTANT INFORMATION ON THE BACK.

IMPORTANT DATA

Physical State; Appearance

CLEAR, PALE YELLOW LIQUID, WITH CHARACTERISTIC ODOUR. TURNS REDDISH TO BROWN ON EXPOSURE TO 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: 3A; (DFG 2006).

Routes of exposure

The substance can be absorbed into the body in hazardous amounts by inhalation, 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.

PHYSICAL PROPERTIES

Boiling point: 222/C

Melting point: 2/C

Relative density (water = 1): 0.99

Solubility in water, g/100 ml at 20/C: 15

Vapour pressure, Pa at 25/C: 13

Relative vapour density (air = 1): 4.19

Relative density of the vapour/air-mixture at 20/C (air = 1): 1.00

Flash point: 96/C c.c.

Auto-ignition temperature: 545/C

Explosive limits, vol% in air: 1-2.7

Octanol/water partition coefficient as log Pow: 2.17

ENVIRONMENTAL DATA

The substance is very toxic to aquatic organisms. It is strongly advised that this substance does not enter the environment.

NOTES

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), 1519 (2,6-Xylidine), 1562 (2,4-Xylidine), 0453 (3,4-Xylidine), 1686 (2,5-Xylidine), 1687 (3,5-Xylidine).

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