1-NAPHTHYLAMINE

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CAS No: 134-32-7
RTECS No: QM1400000
UN No: 2077
EC No: 612-020-00-2

alpha-Naphthylamine
1-Aminonaphthalene
$C_{10}H_9N$
Molecular mass: 143.2

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.	Powder, alcohol-resistant foam, water spray, carbon dioxide.
EXPLOSION			
EXPOSURE		**PREVENT DISPERSION OF DUST! AVOID ALL CONTACT!**	
Inhalation	Blue lips or finger nails. Blue skin. Confusion. Dizziness. Headache. Shortness of breath. Weakness.	Local exhaust or breathing protection.	Fresh air, rest. Refer for medical attention.
Skin	MAY BE ABSORBED! Redness.	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
Eyes	Redness. Pain.	Safety spectacles, or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
Ingestion	Blue lips or fingernails. Blue skin. Dizziness. Headache. Nausea.	Do not eat, drink, or smoke during work. Wash hands before eating.	Rinse mouth. Refer for medical attention.

SPILLAGE DISPOSAL	PACKAGING & LABELLING	
Do NOT wash away into sewer. Sweep spilled substance into sealable containers. Carefully collect remainder, then remove to safe place. Do NOT let this chemical enter the environment. (Extra personal protection: P3 filter respirator for toxic particles).	Xn Symbol N Symbol R: 22-51/53 S: (2-)24-61 UN Hazard Class: 6.1 UN Pack Group: III	Do not transport with food and feedstuffs.

EMERGENCY RESPONSE	STORAGE
Transport Emergency Card: TEC (R)-61G12c NFPA Code: H2; F1; R0	Dry. Keep in the dark. Well closed.

IPCS
International Programme on Chemical Safety

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

SEE IMPORTANT INFORMATION ON THE BACK.

IMPORTANT DATA

Physical State; Appearance
WHITE CRYSTALS, WITH CHARACTERISTIC ODOUR. TURNS RED ON EXPOSURE TO AIR, LIGHT AND MOISTURE.

Chemical dangers
The substance decomposes on burning producing nitrogen oxides and carbon monoxide.
The substance is a weak base.

Occupational exposure limits
TLV not established. MAK not established.

Routes of exposure
The substance can be absorbed into the body by inhalation and through the skin and by ingestion.

Inhalation risk
Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly.

Effects of short-term exposure
The substance is mildly irritating to the eyes and the skin. The substance may cause effects on the blood, resulting in the formation of methaemoglobin. The effects may be delayed. Medical observation is indicated. See Notes.

Effects of long-term or repeated exposure
See Notes.

PHYSICAL PROPERTIES

Boiling point: 300.8°C
Melting point: 50.0°C
Density: 1.12 g/cm^3
Solubility in water: none
Vapour pressure, Pa at 20°C: 0.53
Relative vapour density (air = 1): 4.93
Flash point: 157°C c.c.
Auto-ignition temperature: 460°C
Octanol/water partition coefficient as log Pow: 2.25

ENVIRONMENTAL DATA

The substance is harmful to aquatic organisms. It is strongly advised not to let the chemical enter into the environment because it persists in the environment.

NOTES

Depending on the degree of exposure, periodic medical examination is indicated.
Specific treatment is necessary in case of poisoning with this substance; the appropriate means with instructions must be available.
Bladder cancers reported after occupational exposure to 1-naphthylamine may be due to contamination with 2-naphthylamine which is a human carcinogen.

ADDITIONAL INFORMATION