

3,3'-DIAMINO BENZIDINE

1666
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CAS No: 91-95-2
RTECS No: DV8750000

3,3',4,4'-Biphenyltetramine
(1,1'-Biphenyl)-3,3',4,4'-tetraamine
3,3',4,4'-Diphenyltetramine
3,3',4,4'-Tetraaminobiphenyl
Biphenyl-3,3',4,4'-tetrayltetraamine
 $C_{12}H_{14}N_4$ / $(NH_2)_2C_6H_3C_6H_3(NH_2)_2$
Molecular mass: 214.3

| TYPES OF HAZARD/ EXPOSURE | ACUTE HAZARDS/SYMPTOMS | PREVENTION | FIRST AID/FIRE FIGHTING |
|---------------------------|------------------------|--|---|
| FIRE | Combustible. | NO open flames. | Powder, alcohol-resistant foam, water spray, carbon dioxide. |
| EXPLOSION | | | |
| EXPOSURE | | AVOID ALL CONTACT! | |
| Inhalation | | Closed system and ventilation. | Fresh air, rest. |
| Skin | | Protective gloves. Protective clothing. | Remove contaminated clothes. Rinse and then wash skin with water and soap. |
| Eyes | Redness. | Safety spectacles | Rinse with plenty of water (remove contact lenses if easily possible). |
| Ingestion | | Do not eat, drink, or smoke during work. Wash hands before eating. | Rinse mouth. Give one or two glasses of water to drink. Seek medical attention if you feel unwell |

SPILLAGE DISPOSAL

Personal protection: particulate filter adapted to the airborne concentration of the substance. Do NOT let this chemical enter the environment. Sweep spilled substance into containers; if appropriate, moisten first to prevent dusting.

PACKAGING & LABELLING

GHS classification
Signal: Warning
Excl mark-Health haz
Harmful if swallowed
Suspected of causing genetic defects
Suspected of causing cancer

EMERGENCY RESPONSE

SAFE STORAGE

Dry. Well closed. Separated from food and feedstuffs and strong oxidants. Store in an area without drain or sewer access.

IMPORTANT DATA**Physical State; Appearance**

RED TO BROWN HYGROSCOPIC SOLID IN VARIOUS FORMS

Chemical dangers

The substance decomposes on burning producing nitrogen oxides Reacts with strong oxidants.

Occupational exposure limits

TLV not established.

MAK: Carcinogen category: 3B (DFG 2006).

Routes of exposure

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

Inhalation risk

A harmful concentration of airborne particles can be reached quickly.

Effects of short-term exposure

May cause mechanical irritation to the eyes.

Effects of long-term or repeated exposure

This substance is possibly carcinogenic to humans.

PHYSICAL PROPERTIES

Melting point: 176/C

Solubility in water: (very poor)

Flash point: >200/C

Auto-ignition temperature: 560/C

Octanol/water partition coefficient as log Pow: 0.09

ENVIRONMENTAL DATA**NOTES**

Do NOT take working clothes home.

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

Environmental effects from the substance have not been investigated.

The recommendations on this Card also apply to 3,3'-Diaminobenzidine tetrahydrochloride, CAS-number 7411-49-6.

ADDITIONAL INFORMATION**LEGAL NOTICE**

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