

Common Name: **BENZIDINE**

Synonyms: 4,4'-Bianiline; Diphenylenediamine

CAS No: 92-87-5

 Molecular Formula: C<sub>12</sub>H<sub>12</sub>N<sub>2</sub>

RTK Substance No: 0204

Description: White to grayish-yellow or reddish powder, darkens on exposure to light or air.

## HAZARD DATA

Hazard Rating	Firefighting	Reactivity
<b>4 - Health</b> <b>1 - Fire</b> <b>0 - Reactivity</b>  DOT ID #: UN 1885 ERG Guide #: 153 Hazard Class: 6.1 (Poisonous Material)	<b>Benzidine</b> may burn, but does not readily ignite. Use dry chemical, CO <sub>2</sub> , water spray, an alcohol-resistant foam or other foaming agent. POISONOUS GASES ARE PRODUCED IN FIRE, including <i>Nitrogen Oxides</i> . Use water spray to keep fire-exposed containers cool.	<b>Benzidine</b> may react violently with NITRIC ACID and OXIDIZING AGENTS (such as PERCHLORATES, PEROXIDES, PERMANGANATES, CHLORATES, NITRATES, CHLORINE, BROMINE and FLUORINE). <b>Benzidine</b> is not compatible with HEAT and SUNLIGHT.

## SPILL/LEAKS

 Isolation Distance: 25 to 50 meters  
 (80 to 160 feet)

Use a vacuum with a HEPA filter or a wet method to reduce dust during clean-up. DO NOT DRY SWEEP.

Toxic to aquatic organisms.

## PHYSICAL PROPERTIES

<b>Odor Threshold:</b>	No Information
<b>Flash Point:</b>	No Information
<b>LEL:</b>	N/A
<b>UEL:</b>	N/A
<b>Relative Density:</b>	1.25 (water = 1)
<b>Relative Vapor Density:</b>	6.36 (air = 1)
<b>Water Solubility:</b>	Soluble in hot water
<b>Boiling Point:</b>	752°F (400°C)
<b>Melting Point:</b>	239°F (115°C)

## EXPOSURE LIMITS

<b>OSHA:</b>	Lowest feasible level
<b>NIOSH:</b>	Lowest feasible level
<b>ACGIH:</b>	Eliminate exposure if possible
<b>IDLH LEVEL:</b>	No Information

## PROTECTIVE EQUIPMENT

<b>Gloves:</b>	Rubber, Nitrile
<b>Coverall:</b>	DuPont Tychem® fabrics (for <b>Benzidine</b> in 25% <i>Methanol</i> )
<b>Boot:</b>	Rubber
<b>Respirator:</b>	Supplied air

## HEALTH EFFECTS

<b>Eyes:</b>	Irritation
<b>Skin:</b>	Irritation
<b>Acute:</b>	Nose and throat irritation
<b>Chronic:</b>	Cancer (bladder) in humans Skin allergy with itching and rash

## FIRST AID AND DECONTAMINATION

Remove the person from exposure.  
 Flush eyes with large amounts of water for at least 15 minutes.  
 Remove contact lenses if worn.  
 Remove contaminated clothing. Wash contaminated skin with soap and water.  
 Transfer promptly to a medical facility.