

Common Name: **3,3'-DIMETHOXYBENZIDINE**

Synonyms: o-Dianisidine; 3,3'-Dianisidine

CAS No: 119-90-4

Molecular Formula: $C_{14}H_{16}N_2O_2$

RTK Substance No: 0734

Description: Colorless, crystalline solid

HAZARD DATA

Hazard Rating	Firefighting	Reactivity
2 - Health 1 - Fire 0 - Reactivity DOT#: UN 2431 ERG Guide #: 153 Hazard Class: 6.1 (Poison)	3,3'-Dimethoxybenzidine may burn, but does not readily ignite. Use dry chemical, CO_2 , or water spray as extinguishing agents. POISONOUS GASES ARE PRODUCED IN FIRE, including <i>Nitrogen Oxides</i> .	3,3'-Dimethoxybenzidine is not compatible with OXIDIZING AGENTS (such as PERCHLORATES, PEROXIDES, PERMANGANATES, CHLORATES, NITRATES, CHLORINE, BROMINE and FLUORINE). Protect from LIGHT, HEAT and AIR.

SPILL/LEAKS

Isolation Distance:

Spill: 25 meters (75 feet)

Fire: 800 meters (1/2 mile)

Moisten spilled material first or use a HEPA-filter vacuum for clean-up and place into sealed containers for disposal.

PHYSICAL PROPERTIES

Flash Point:	403°F (206°C)
Vapor Density:	8.5 (air = 1)
Vapor Pressure:	8.8×10^{-9} mm Hg at 77°F (25°C)
Water Solubility:	Very slightly soluble
Melting Point:	279°F (137°C)
Molecular Weight:	244.3

EXPOSURE LIMITS

No occupational exposure limits have been established for **3,3'-Dimethoxybenzidine**.

The Protective Action Criteria values are:

PAC-1 = 4 mg/m³

PAC-2 = 25 mg/m³

PAC-3 = 400 mg/m³

PROTECTIVE EQUIPMENT

Gloves:	Nitrile and Natural Rubber
Coveralls:	Tyvek®
Respirator:	Full facepiece APR with P100 filters >4 mg/m ³ - SCBA

HEALTH EFFECTS

Eyes:	Irritation
Skin:	Irritation, rash, redness and itching
Inhalation:	Nose and throat irritation
Chronic:	Cancer (bladder, intestines, skin) in animals

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.
Quickly remove contaminated clothing and wash contaminated skin with large amounts of soap and water.
Begin artificial respiration if breathing has stopped and CPR if necessary.
Transfer promptly to a medical facility.