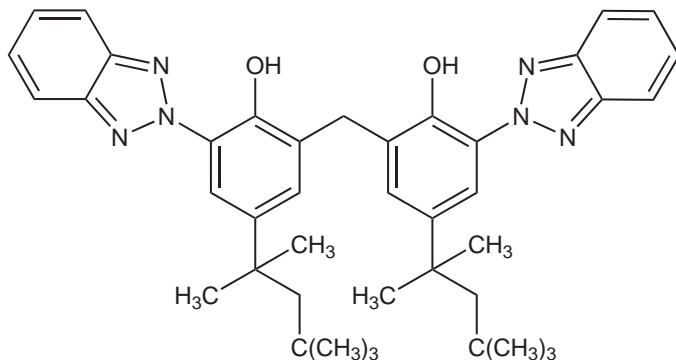


1294. Bisotrizole. [103597-45-1] 2,2'-Methylenebis[6-(2*H*-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl)phenol]; MBBT; Tinosorb M; Tinuvin 360. C₄₁H₅₀N₆O₂; mol wt 658.87. C 74.74%, H 7.65%, N 12.76%, O 4.86%. UV-A filter with dual mechanism of action. Photostable organic molecule with broad UV absorption; microfine structure causes light scattering and reflection. Prepn and use in light stabilizer formulations: N. Kubota, A. Nishimura, **EP 180992**; *idem*, **US 4681905** (1986, 1987 both to Adeka Argus). Light stabilization of polymers: G. Rytz *et al.*, *Angew. Makromol. Chem.* **247**, 213 (1997). Skin photoprotection study: C. Gélis *et al.*, *Photodermatol. Photoimmunol. Photomed.* **19**, 242 (2003). HPLC determ in sun care formulations: C. G. Smyrniotakis, H. A. Archontaki, *J. Chromatogr. A* **1031**, 319 (2004). UV attenuating properties of microparticles: B. Herzog *et al.*, *J. Colloid Interface Sci.* **276**, 354 (2004).



Slightly yellow powder, mp 195°. Flash pt: >200°C. d^{20} 1.2. Vapor pressure (25°): 6×10^{-13} Pa. Soly at 20° (%w/w): water < 0.001; acetone 0.05; chloroform 100; *n*-hexane 0.03; methylene chloride 75; toluene 34. Absorption max (chloroform): 308, 349 nm (ϵ 31895). Absorption max (*n*-heptane): 348 nm (ϵ 31600).

USE: Light stabilizer in polymers and resins.

THERAP CAT: Ultraviolet screen.