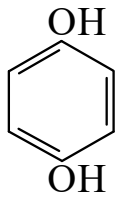
>>**Entry Name: 1,4-Benzenediol,** 9CI
ENTRY UNDER REVIEW
Synonym(s): Hydroquinone, 8CI, USAN**.** Hydroquinol. 1,4-Dihydroxybenzene. Quinol. Pyrogentisinic acid. Arctuvin. Eldopaque. Eldoquin. Pyrogentisic acid



CAS Registry Number: 123-31-9
Related CAS Registry Numbers(s): 1122-95-8 3225-30-7

Molecular Formula: $C_6H_6O_2$
Molecular Weight: 110.112
Accurate Mass: 110.03678
Percentage Composition: C 65.45%; H 5.49%; O 29.06%
Biological Source: Isol. from plant sources, eg. *Pyrola rotundifolia* and by hydrol. of plant tannins. Manuf. by hydroxylation of phenol, oxidation of aniline, or hydroperoxidation of *p*-diisopropylbenzene
Metabolism: Active metab. of Benzene HMJ64-R
Use/Importance: Used as 0.05% soln. in conc. H_2SO_4 for photometric detn. of Nb, Ta, W. Component of photographic developers. Used for prodn. of antioxidants, polymerisation inhibitors, agricultural chemicals. Comonomer for aromatic polyesters
Biological Use/Importance: Depigmentor, antiseptic agent
Physical Description: Needles (H_2O)
Melting Point: Mp 172°
Boiling Point: Bp_{730} 285°
Solubility: Sol. MeOH
pKa Value: pK_{a1} 9.91; pK_{a2} 11.56 (20°)
Calculated Log P Data: Log P 0.81 (calc)
UV: [neutral] λ_{max} 227 (); 295 () (MeOH) (Berdy) [neutral] λ_{max} 250 (ε 204) ($CHCl_3$) (Berdy)
Other Data: Component of Artra and Solaquin
Hazard & Toxicity: Fl. p. 165°, autoignition temp. 515°. Eye irritant. Prolonged or repeated exposure can cause corneal pigmentation and other damage to the eyes. Repeated skin contact produces irritation; sensitisation, dermatitis, and depigmentation. LD_{50} (rat, orl) 320 mg/kg. OES: long-term 2 mg m^{-3}; short-term 4 mg m^{-3}. Exp. carcinogen

Aldrich: H1790-2
Fluka: 53965
Sigma: H7148

>>**Derivative:** *O*-β-D-Glucopyranoside
see Arbutin, BWQ88-O

>>**Derivative:** *O*-[4-Hydroxybenzoyl-(→6)-β-D-glucopyranoside]
Synonym(s): Lanceoloside A

Molecular Formula: $C_{19}H_{20}O_9$
Molecular Weight: 392.362
Accurate Mass: 392.110735
Percentage Composition: C 58.16%; H 5.14%; O 36.70%
Biological Source: Constit. of *Lophira lanceolata*
Physical Description: Pale yellow solid

>>**Derivative:** *O*-[β-D-Xylopyranosyl-(1→6)-β-D-glucopyranoside]
see Arbutin, BWQ88-O