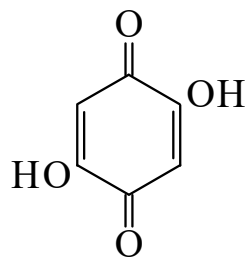




>>Entry Name: **2,5-Dihydroxy-1,4-benzoquinone**

Synonym(s): 2,5-Dihydroxy-2,5-cyclohexadiene-1,4-dione, 9CI



CAS Registry Number: 615-94-1

Molecular Formula: C₆H₄O₄

Molecular Weight: 140.095

Accurate Mass: 140.01096

Percentage Composition: C 51.44%; H 2.88%; O 45.68%

General Statement: Tautomeric with 4,5-Dihydroxy-1,2-benzoquinone [FGM53-Q](#)

Use/Importance: Used as a satd. aq. soln. for photometric detn. of Sc, Th, Zr. Forms ladder polymers with some tetraamines

Physical Description: Golden-orange cryst. (EtOH), dark-yellow needles (EtOAc)

Melting Point: Mp 210 dec.° (215-220° subl.)

Solubility: Sol. EtOH, Me₂CO; sl. sol. H₂O

pKa Value: pK_{a1} 2.73; pK_{a2} 5.18 (25°)

Aldrich: 19546-4

>>Derivative: Di-Ac

CAS Registry Number: 16523-32-3

Molecular Formula: C₁₀H₈O₆

Molecular Weight: 224.17

Accurate Mass: 224.03209

Percentage Composition: C 53.58%; H 3.60%; O 42.82%

Physical Description: Yellow plates or prisms (C₆H₆)

Melting Point: Mp 150-152°

>>Derivative: Dibenzoyl

CAS Registry Number: 51767-59-0

Molecular Formula: C₂₀H₁₂O₆

Molecular Weight: 348.311

Accurate Mass: 348.06339

Percentage Composition: C 68.97%; H 3.47%; O 27.56%

Physical Description: Gold plates (AcOH)

Melting Point: Mp 174°

>>Derivative: Di-Me ether

Synonym(s): 2,5-Dimethoxy-1,4-benzoquinone. **Thermophillin.** Thermophyllin

CAS Registry Number: 3117-03-1

Molecular Formula: C₈H₈O₄

Molecular Weight: 168.149

Accurate Mass: 168.04226

Percentage Composition: C 57.14%; H 4.80%; O 38.06%

Biological Source: Prod. by *Polyporus fumosus*; also isol. from cultures of *Lenzites thermophila*, *Trichoderma pseudokoningii* and *Glocophyllum sepiarum*. Also isol. from higher plants *Acorus calamus*, *Cassia obtusifolia*, *Dalbergia melanoxylon*

Use/Importance: Mildly active against gram-positive bacteria and mycobacteria

Physical Description: Yellow prisms (MeOH)

Melting Point: Mp 250 dec.° (300° dec.)