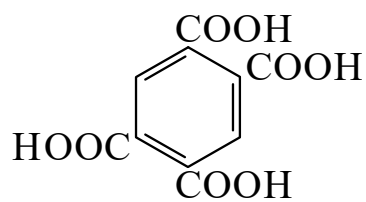




>>Entry Name: 1,2,4,5-Benzenetetracarboxylic acid, 9CI

Synonym(s): Pyromellitic acid



CAS Registry Number: 89-05-4

Molecular Formula: C₁₀H₆O₈

Molecular Weight: 254.153

Accurate Mass: 254.00627

Percentage Composition: C 47.26%; H 2.38%; O 50.36%

Use/Importance: Used as 2% aq. soln. for gravimetric detn. of Hf, Th, Zr. Intermed. for polyesters and polyamides

Physical Description: Prisms + 2H₂O (H₂O)

Melting Point: Mp 275° (anhyd.). Mp 259 , 262°

Solubility: Sl. sol. H₂O; sol. EtOH

pKa Value: pK_{a1} 1.87; pK_{a2} 2.72; pK_{a3} 4.3; pK_{a4} 5.52 (25°)

Hazard & Toxicity: Irritant. LD₅₀ (mus, ipr) 300 mg/kg

Aldrich: B400-7

Fluka: 83179

Sigma: P8544

>>Derivative: 1,4-Di-Me ester

Molecular Formula: C₁₂H₁₀O₈

Molecular Weight: 282.206

Accurate Mass: 282.03757

Percentage Composition: C 51.07%; H 3.57%; O 45.36%

Melting Point: Mp 176-177°

>>Derivative: Tetra-Me ester

CAS Registry Number: 635-10-9

Molecular Formula: C₁₄H₁₄O₈

Molecular Weight: 310.26

Accurate Mass: 310.06887

Percentage Composition: C 54.20%; H 4.55%; O 41.25%

Physical Description: Leaflets (MeOH)

Melting Point: Mp 143-144°

Rare Chemicals Library: S65321-7

>>Derivative: Tetra-Et ester

CAS Registry Number: 6634-01-1

Molecular Formula: C₁₈H₂₂O₈

Molecular Weight: 366.367

Accurate Mass: 366.13147

Percentage Composition: C 59.01%; H 6.05%; O 34.94%

Melting Point: Mp 54°

>>Derivative: Tetranitrile

Synonym(s): 1,2,4,5-Tetracyanobenzene

CAS Registry Number: 712-74-3

Molecular Formula: C₁₀H₂N₄

Molecular Weight: 178.153

Accurate Mass: 178.027946

Percentage Composition: C 67.42%; H 1.13%; N 31.45%

Melting Point: Mp 265 dec.°

Aldrich: 39198-0

Fluka: 87125