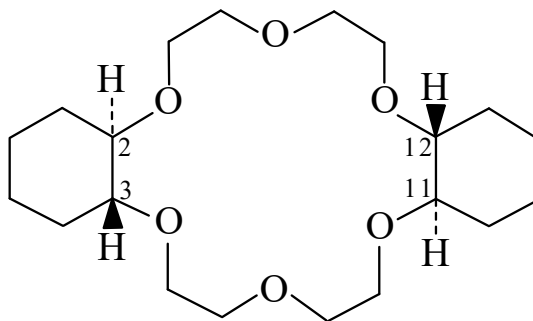




>>Entry Name: Dicyclohexyl-18-crown-6

Synonym(s): Eicosahydrodibenzo[*b,k*][1,4,7,10,13,16]hexaoxacyclooctadecine, 9Cl, 8Cl. 2,3,11,12-Dicyclohexano-1,4,7,10,13,16-hexaoxacyclooctadecane. Dicyclohexano-18-crown-6



(2*RS*,3*RS*,11*R*,12*RS*)-*form*

CAS Registry Number: 16069-36-6

Molecular Formula: C₂₀H₃₆O₆

Molecular Weight: 372.501

Accurate Mass: 372.25119

Percentage Composition: C 64.49%; H 9.74%; O 25.77%

Use/Importance: Complexing agent for metal salts. Complexes with KMnO₄ to form a benzene-soluble oxidant and with other polar reagents to increase solubility in nonpolar solvs. Used in extraction-separation of Hg, Ag; as 1% soln. in dipentyl phthalate as ionophore in K-selective electrode

Physical Description: Colourless or pale yellow wax

Melting Point: Mp 38-54°

Boiling Point: Bp 344°

Hazard & Toxicity: Rapidly absorbed through skin. Severe skin irritant, may cause permanent eye damage. LD₅₀ (rat, orl) 176 mg/kg. Exp. teratogen

Aldrich: 15840-2

Fluka: 36665

Sigma: D2637

>>Variant: (2*RS*,3*RS*,11*RS*,12*RS*)-form

Synonym(s): *trans-transoid-trans-form*. *trans-anti-trans-form*

CAS Registry Number: 54383-26-5

Molecular Formula: C₂₀H₃₆O₆

Molecular Weight: 372.501

Accurate Mass: 372.25119

Percentage Composition: C 64.49%; H 9.74%; O 25.77%

Physical Description: Needles (Et₂O)

Melting Point: Mp 77-80°

Other Data: This isomer also known in opt. active form

>>Variant: (2*RS*,3*RS*,11*SR*,12*SR*)-form

Synonym(s): *trans-cisoid-trans-form*. *trans-syn-trans-form*

CAS Registry Number: 54383-27-6

Molecular Formula: C₂₀H₃₆O₆

Molecular Weight: 372.501

Accurate Mass: 372.25119

Percentage Composition: C 64.49%; H 9.74%; O 25.77%

Physical Description: Prisms (Et₂O)

Melting Point: Mp 120-121°

>>Variant: (2*RS*,3*SR*,11*SR*,12*RS*)-form

Synonym(s): *cis-transoid-cis-form*. *cis-anti-cis-form*. Isomer B

CAS Registry Number: 15128-66-2

Molecular Formula: C₂₀H₃₆O₆

Molecular Weight: 372.501

Accurate Mass: 372.25119

Percentage Composition: C 64.49%; H 9.74%; O 25.77%

Physical Description: Cryst. (hexane)

Melting Point: Mp 69-70°