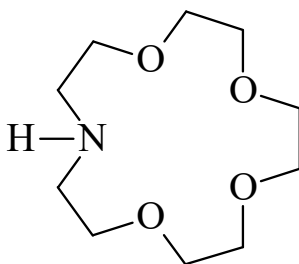




>>Entry Name: 1,4,7,10-Tetraoxa-13-azacyclopentadecane, 9CI

Synonym(s): Aza-15-crown-5. Monoaza-15-crown-5



CAS Registry Number: 66943-05-3

Molecular Formula: $C_{10}H_{21}NO_4$

Molecular Weight: 219.28

Accurate Mass: 219.147059

Percentage Composition: C 54.77%; H 9.65%; N 6.39%; O 29.19%

Physical Description: Soft, hygroscopic solid

Melting Point: Mp 30-32° (27-30°)

Aldrich: 36409-6

Fluka: 11380

>>Derivative: Hydrochloride

CAS Registry Number: 77102-02-4

Physical Description: Brownish cryst.

Melting Point: Mp 113-115°

>>Derivative: *N*-Me

Synonym(s): 13-Methyl-1,4,7,10-tetraoxa-13-azacyclopentadecane, 9CI

CAS Registry Number: 69978-46-7

Molecular Formula: $C_{11}H_{23}NO_4$

Molecular Weight: 233.307

Accurate Mass: 233.162709

Percentage Composition: C 56.63%; H 9.94%; N 6.00%; O 27.43%

Use/Importance: Used as 0.01*M* soln. in 95% MeOH for complexation of Li, Na, K, Ca, Sr (95% MeOH)

Physical Description: Oil

Boiling Point: Bp_{0.005} 88-90°

Solubility: Sol. MeOH

pKa Value: p*K*_{a1} 9.58 (95% MeOH)

>>Derivative: *N*-Ph

CAS Registry Number: 66750-10-5

Molecular Formula: $C_{16}H_{25}NO_4$

Molecular Weight: 295.378

Accurate Mass: 295.178359

Percentage Composition: C 65.06%; H 8.53%; N 4.74%; O 21.67%

Physical Description: Cryst.

Melting Point: Mp 44-45°

Rare Chemicals Library: S17347-9

>>Derivative: *N*-(2-Methoxyethyl)

CAS Registry Number: 79402-94-1

Molecular Formula: $C_{13}H_{27}NO_5$

Molecular Weight: 277.36

Accurate Mass: 277.188924

Percentage Composition: C 56.30%; H 9.81%; N 5.05%; O 28.84%

Use/Importance: Used as 0.01*M* soln. in 95% MeOH for complexation of Li, Na, K, Ca, Sr (in 95% MeOH)

Physical Description: Oil

Solubility: Sol. MeOH

pKa Value: p*K*_a 8.82 (95% MeOH)

References: