



>>Entry Name: 3,6,9,12-Tetraoxatetradecane-1,14-diol, 9CI

Synonym(s): Pentaethylene glycol

CAS Registry Number: 4792-15-8

Related CAS Registry Numbers(s): 57624-62-1 70290-40-3 109574-22-3 109789-39-1 115124-93-1

HOCH<sub>2</sub>CH<sub>2</sub>OCH<sub>2</sub>CH<sub>2</sub>OCH<sub>2</sub>CH<sub>2</sub>OCH<sub>2</sub>CH<sub>2</sub>OCH<sub>2</sub>CH<sub>2</sub>OH

Molecular Formula: C<sub>10</sub>H<sub>22</sub>O<sub>6</sub>

Molecular Weight: 238.28

Accurate Mass: 238.14164

Percentage Composition: C 50.41%; H 9.31%; O 40.29%

Physical Description: Oil

Boiling Point: Bp<sub>0.6</sub> 175°

Refractive Index: n<sub>D</sub><sup>20</sup> 1.4620

Aldrich: 33575-4

Fluka: 76435

>>Derivative: Bis(4-methylbenzenesulfonyl)

CAS Registry Number: 41024-91-3

Molecular Formula: C<sub>24</sub>H<sub>34</sub>O<sub>12</sub>S<sub>2</sub>

Molecular Weight: 578.657

Accurate Mass: 578.14917

Percentage Composition: C 49.82%; H 5.92%; O 33.18%; S 11.08%

Use/Importance: Used in the synth. of crown ethers and cryptands

Physical Description: Yellow oil

Refractive Index: n<sub>D</sub><sup>20</sup> 1.5240

Aldrich: 30958-3

Fluka: 76432

>>Derivative: Mono-Me ether

Synonym(s): 2,5,8,11,14-Pentaoxahexadecan-16-ol, 9CI

CAS Registry Number: 23778-52-1

Molecular Formula: C<sub>11</sub>H<sub>24</sub>O<sub>6</sub>

Molecular Weight: 252.307

Accurate Mass: 252.15729

Percentage Composition: C 52.37%; H 9.59%; O 38.05%

Physical Description: Oil

Boiling Point: Bp<sub>0.1</sub> 127-130°

>>Derivative: Di-Me ether

Synonym(s): 2,5,8,11,14,17-Hexaoxaoctadecane, 9CI. Pentaglyme

CAS Registry Number: 1191-87-3

Molecular Formula: C<sub>12</sub>H<sub>26</sub>O<sub>6</sub>

Molecular Weight: 266.334

Accurate Mass: 266.17294

Percentage Composition: C 54.12%; H 9.84%; O 36.04%

Physical Description: Oil

Boiling Point: Bp<sub>0.27</sub> 100-108°. Bp<sub>0.25</sub> 120-123°

>>Derivative: Di-Et ether

Synonym(s): 3,6,9,12,15,18-Hexaoxaicosane, 9CI. 1,2-Bis[2-(2-ethoxyethoxy)ethoxy]ethane

CAS Registry Number: 23601-39-0

Molecular Formula: C<sub>14</sub>H<sub>30</sub>O<sub>6</sub>

Molecular Weight: 294.387

Accurate Mass: 294.20424

Percentage Composition: C 57.12%; H 10.27%; O 32.61%

Boiling Point: Bp<sub>3</sub> 175°