



>>Entry Name: 1,5-Pentanedithiol

Synonym(s): 1,5-Dimercaptopentane

CAS Registry Number: 928-98-3

HSCH<sub>2</sub>(CH<sub>2</sub>)<sub>3</sub>CH<sub>2</sub>SH

Molecular Formula: C<sub>5</sub>H<sub>12</sub>S<sub>2</sub>

Molecular Weight: 136.282

Accurate Mass: 136.03804

Percentage Composition: C 44.07%; H 8.87%; S 47.06%

Melting Point: Mp -72°

Boiling Point: Bp 217°. Bp<sub>15</sub> 108-109°. Bp<sub>10</sub> 90°

Density: d<sub>4</sub><sup>20</sup> 1.016

Aldrich: 24255-1

Fluka: 76920

>>Derivative: Di-Ac

Molecular Formula: C<sub>9</sub>H<sub>16</sub>O<sub>2</sub>S<sub>2</sub>

Molecular Weight: 220.356

Accurate Mass: 220.05917

Percentage Composition: C 49.06%; H 7.32%; O 14.52%; S 29.10%

Boiling Point: Bp<sub>0.5</sub> 184-187°

>>Derivative: Di-S-Me

Synonym(s): 1,5-Bis(methylthio)pentane, 9CI

CAS Registry Number: 54410-63-8

Molecular Formula: C<sub>7</sub>H<sub>16</sub>S<sub>2</sub>

Molecular Weight: 164.335

Accurate Mass: 164.06934

Percentage Composition: C 51.16%; H 9.81%; S 39.03%

Boiling Point: Bp<sub>22</sub> 128°. Bp<sub>8</sub> 112-114°

Rare Chemicals Library: S37589-6

#### References:

*Aldrich Library of 13C and 1H FT NMR Spectra*, 1992, **1**, 420B, (*nmr*)

*Aldrich Library of FT-IR Spectra, 1st edn.*, 1985, **1**, 261A, (*ir*)

*Aldrich Library of FT-IR Spectra: Vapor Phase*, 1989, **3**, 342D, (*ir*)

Hall, W.P. *et al.*, *J.A.C.S.*, 1943, **65**, 1466, (*synth*)

Grogan, C.H. *et al.*, *J.O.C.*, 1955, **20**, 50, (*synth*)

Cossar, B.C. *et al.*, *J.O.C.*, 1962, **27**, 93, (*synth*)