



>>Entry Name: (Ethylenedithio)diacetic acid, 8Cl

Synonym(s): 2,2'-[1,2-Ethanediybis(thio)]bisacetic acid, 9Cl. Ethylenebisthioglycolic acid. 1,2-Bis(carboxymethylthio)ethane. 3,6-Dithiaoctanedioic acid. Trithioglycolic acid. *sym*-Ethanedithiol-*S,S'*-diacetic acid

CAS Registry Number: 7244-02-2

Related CAS Registry Numbers(s): 31249-80-6 53773-62-9

HOOCCH<sub>2</sub>SCH<sub>2</sub>CH<sub>2</sub>SCH<sub>2</sub>COOH

Molecular Formula: C<sub>6</sub>H<sub>10</sub>O<sub>4</sub>S<sub>2</sub>

Molecular Weight: 210.275

Accurate Mass: 210.00205

Percentage Composition: C 34.27%; H 4.79%; O 30.44%; S 30.50%

Physical Description: Cryst. (EtOAc or H<sub>2</sub>O)

Melting Point: Mp 107-108°

Fluka: 46084

Rare Chemicals Library: S57087-7

>>Derivative: Di-Na salt

CAS Registry Number: 31188-63-3

Use/Importance: Used as 0.01*M* aq. soln. for photometric detn. of Pd ( $\lambda_{\max}$  290 nm,  $\epsilon$  21000)

Physical Description: Cryst.

Solubility: Sol. H<sub>2</sub>O

>>Derivative: Di-Et ester

Molecular Formula: C<sub>10</sub>H<sub>18</sub>O<sub>4</sub>S<sub>2</sub>

Molecular Weight: 266.382

Accurate Mass: 266.06465

Percentage Composition: C 45.09%; H 6.81%; O 24.02%; S 24.08%

Boiling Point: Bp<sub>0.7</sub> 152°

>>Derivative: Dihydrazide

CAS Registry Number: 14845-91-1

Physical Description: Cryst. (EtOH)

Melting Point: Mp 136-137°

>>Derivative: *S,S,S',S'*-Tetraoxide

Synonym(s): (Ethylenedisulfonyl)diacetic acid

CAS Registry Number: 63512-47-0

Molecular Formula: C<sub>6</sub>H<sub>10</sub>O<sub>8</sub>S<sub>2</sub>

Molecular Weight: 274.272

Accurate Mass: 273.98171

Percentage Composition: C 26.28%; H 3.67%; O 46.67%; S 23.38%

Melting Point: Mp 260-262°

#### References:

- Luettringhaus, A. *et al.*, *Annalen*, 1959, **624**, 79, (*ester*)  
Podlaha, J. *et al.*, *Inorg. Chim. Acta*, 1971, **5**, 413, (*synth, ir, props*)  
Ford, G.J. *et al.*, *J. Inorg. Nucl. Chem.*, 1971, **33**, 4119, (*synth*)  
Van der Meer, H., *J.C.S. Dalton*, 1973, 1, (*cryst struct*)  
Pitombo, L.R.M. *et al.*, *Anal. Chim. Acta*, 1975, **75**, 391; 1978, **101**, 77, (*synth, ir*)  
Pitombo, L.R.M. *et al.*, *Mikrochim. Acta*, 1976, **2**, 121, (*detn, Pd*)  
Naboli, A., *Ann. Chim. (Rome)*, 1979, **69**, 399, (*detn, Pd*)  
Choppin, G.R. *et al.*, *Inorg. Chem.*, 1980, **19**, 1686, (*synth, pmr, cmr*)  
Baliah, V. *et al.*, *Indian J. Chem., Sect. B*, 1981, **20**, 716, (*deriv*)  
Shkol'nikova, L.M. *et al.*, *Zh. Strukt. Khim.*, 1982, **23**, 96, (*cryst struct*)