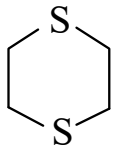
>>**Entry Name: 1,4-Dithiane,** 9CI
ENTRY UNDER REVIEW
Synonym(s): *p*-Dithiane, 8CI. Tetrahydro-1,4-dithiin



CAS Registry Number: 505-29-3
Related CAS Registry Numbers(s): 10348-97-7 57983-04-7
Type of Compound Code(s): PA2300

Molecular Formula: $C_4H_8S_2$
Molecular Weight: 120.239
Accurate Mass: 120.00674
Percentage Composition: C 39.96%; H 6.71%; S 53.34%
Use/Importance: Gives colour reaction with $HgCl_2$
Physical Description: Monoclinic prisms
Melting Point: Mp 112-113°
Boiling Point: Bp 199-200°
Solubility: Sol. EtOH, Et_2O, Me_2CO, AcOH; spar. sol. H_2O
Other Data: Subl. at r.t., volatile in steam and EtOH

Aldrich: D21770-0

>>**Derivative:** *S*-Oxide

Molecular Formula: $C_4H_8OS_2$
Molecular Weight: 136.239
Accurate Mass: 136.001655
Percentage Composition: C 35.26%; H 5.92%; O 11.74%; S 47.07%
Melting Point: Mp 125.5-127°

>>**Derivative:** S^1,S^1-Dioxide

Molecular Formula: $C_4H_8O_2S_2$
Molecular Weight: 152.238
Accurate Mass: 151.99657
Percentage Composition: C 31.56%; H 5.30%; O 21.02%; S 42.13%
Melting Point: Mp 200°

>>**Derivative:** *trans*-S^1,S^4-Dioxide

CAS Registry Number: 10348-98-8
Physical Description: Cryst. (EtOH aq.)
Melting Point: Mp 261-262 dec.°

References:

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Hunter, G. *et al.*, *J.C.S. Perkin 2*, 1978, 712, *(pmr)*
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