>>**Entry Name: Tribromoacetaldehyde**
Synonym(s): Tribromoethanal. Bromal

CAS Registry Number: 115-17-3

Br_3CCHO

Molecular Formula: C_2HBr_3O
Molecular Weight: 280.741
Accurate Mass: 277.817748
Percentage Composition: C 8.56%; H 0.36%; Br 85.39%; O 5.70%
Biological Source: Isol. from *Asparagopsis* spp.
Use/Importance: Formerly used as hypnotic
Physical Description: Yellowish oily liq.
Boiling Point: Bp 174° dec.. Bp_9 61°
Solubility: Sol. H_2O, EtOH
Density: d_4^{25}2.665

Aldrich: T4800-3
Fluka: 16180

>>**Derivative:** Covalent hydrate
Synonym(s): 2,2,2-Tribromo-1,1-ethanediol. Bromal hydrate

CAS Registry Number: 507-42-6
Molecular Formula: $C_2H_3Br_3O_2$
Molecular Weight: 298.756
Accurate Mass: 295.828313
Percentage Composition: C 8.04%; H 1.01%; Br 80.24%; O 10.71%
Physical Description: Deliquescent cryst.
Melting Point: Mp 53.5°
Solubility: Sol. H_2O, EtOH, $CHCl_3$

>>**Derivative:** Hydrate, di-Ac
Synonym(s): 1,1,1-Tribromo-2,2-diacetoxyethane. Tribromoethylidene diacetate

Molecular Formula: $C_6H_7Br_3O_4$
Molecular Weight: 382.831
Accurate Mass: 379.849443
Percentage Composition: C 18.82%; H 1.84%; Br 62.62%; O 16.72%
Melting Point: Mp 77-78°

>>**Derivative:** Di-Et acetal
Synonym(s): 1,1,1-Tribromo-2,2-diethoxyethane

Molecular Formula: $C_6H_{11}Br_3O_2$
Molecular Weight: 354.864
Accurate Mass: 351.890913
Percentage Composition: C 20.31%; H 3.12%; Br 67.55%; O 9.02%
Boiling Point: $Bp_{22.5}$ 138-141° (lit. gives a pressure range)

References:

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **1**, 478A, *(ir)*
Aldrich Library of 13C and 1H FT NMR Spectra, 1992, **1**, 747C, *(nmr)*
Aldrich Library of FT-IR Spectra: Vapor Phase, 1989, **3**, 569A, *(ir)*
Schäffer, L.*, Ber.*, 1871, **4**, 366, *(synth)*
Org. Synth., 1937, **17**, 18, *(synth)*
Cristol, S.J. *et al.*, *J.A.C.S.*, 1946, **68**, 140, *(di-Ac)*
Jain, S.R. *et al.*, *Tetrahedron*, 1964, **20**, 1589, *(hydrate)*
Fenical, W. *et al.*, *Proc. Int. Seaweed Symp.*, 1977, **9**, 387-400; *CA*, **91**, 14474y, *(isol)*
Lewis, R.J.*, Sax's Dangerous Properties of Industrial Materials, 8th edn., Van Nostrand Reinhold*, 1992, THU500

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