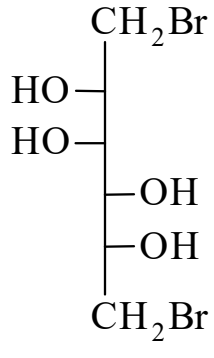
>>**Entry Name: 1,6-Dibromo-1,6-dideoxymannitol,** 9Cl, 8Cl
Synonym(s): Mitobronitol, BAN, INN, JAN**.** Myebrol. Myelobromol. DBM. NSC 94100. WR 220057



Molecular Formula: $C_6H_{12}Br_2O_4$
Molecular Weight: 307.966
Accurate Mass: 305.950232
Percentage Composition: C 23.40%; H 3.93%; Br 51.89%; O 20.78%
Use/Importance: Alkylating agent; antineoplastic agent
Calculated Log P Data: Log P –2 (calc)

>>**Variant:** D-form
CAS Registry Number: 488-41-5

Molecular Formula: $C_6H_{12}Br_2O_4$
Molecular Weight: 307.966
Accurate Mass: 305.950232
Percentage Composition: C 23.40%; H 3.93%; Br 51.89%; O 20.78%
Physical Description: Cryst. (MeOH/dichloroethane)
Melting Point: Mp 176-178°
Hazard & Toxicity: Human systemic effects when used therapeutically. Exp. reprod. and teratogenic effects. LD_{50} (rat, orl) 1500 mg/kg

Sigma: D4393

>>**Derivative:** 3,4-*O*-Isopropylidene
Synonym(s): 1,6-Dibromo-1,6-dideoxy-3,4-*O*-isopropylidene-D-mannitol

Molecular Formula: $C_9H_{16}Br_2O_4$
Molecular Weight: 348.031
Accurate Mass: 345.981532
Percentage Composition: C 31.06%; H 4.63%; Br 45.92%; O 18.39%
Melting Point: Mp 71-72°
Optical Rotation: $[\alpha]_D^{20}$+32.8 (Me_2CO)

>>**Derivative:** 3,4-*O*-Isopropylidene, 2,5-di-Ac

Molecular Formula: $C_{13}H_{20}Br_2O_6$
Molecular Weight: 432.105
Accurate Mass: 430.002662
Percentage Composition: C 36.14%; H 4.67%; Br 36.98%; O 22.22%
Melting Point: Mp 49-50°
Optical Rotation: $[\alpha]_D^{20}$+13.4 ($CHCl_3$)

>>**Derivative:** 3,4-*O*-Isopropylidene, 2,5-dimesyl

Melting Point: Mp 112-113°
Optical Rotation: $[\alpha]_D^{20}$–1.9 (dioxan)

>>**Derivative:** Tetramesyl

Melting Point: Mp 105-107°
Optical Rotation: $[\alpha]_D^{20}$+29.1 (c, 1.0 in $CHCl_3$)

References: