



>>Entry Name: **Hydroxymethanediphosphonic acid**

Synonym(s): (Hydroxymethylene)bis(phosphonic acid), 9CI. **Oxidronic acid**, BAN, INN, USAN. HMDP

CAS Registry Number: 15468-10-7

HOCH[P(O)(OH)₂]₂

Molecular Formula: CH₆O₇P₂

Molecular Weight: 192.002

Accurate Mass: 191.958879

Percentage Composition: C 6.26%; H 3.15%; O 58.33%; P 32.26%

Use/Importance: Weak inhibitor of AMV reverse transcriptase and DNA-polymerase. Calcium regulator. Diagnostic aid for bone visualisation

Calculated Log P Data: Log P –2.85 (uncertain value) (calc)

>>Derivative: Di-Na salt

CAS Registry Number: 14255-61-9

Melting Point: Mp 244-249°

References:

Quimby, O.T. *et al.*, *J.O.C.*, 1967, **32**, 4111, (*synth*)

Eriksson, B. *et al.*, *Biochim. Biophys. Acta*, 1982, **696**, 115, (*props*)

Eubank, W.B. *et al.*, *J. Parasitol.*, 1982, **68**, 599, (*props*)

Shinoda, H. *et al.*, *Calcif. Tissue Int.*, 1983, **35**, 87, (*props*)