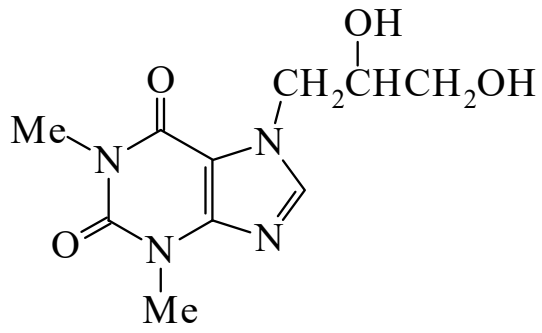
>>**Entry Name: Diprophylline,** BAN, INN
Synonym(s): 7-(2,3-Dihydroxypropyl)-3,7-dihydro-1,3-dimethyl-1*H*-purine-2,6-dione, 9CI. 7-(2,3-Dihydroxypropyl)theophylline, 8CI. Diprofilin. **Dyphylline,** USAN**.** Glyfyllin. Glyphylline. Hyphylline. Theocardin. Asthmolysin. Neophyllin. Neutraphylline. Many other names



CAS Registry Number: 479-18-5
Type of Compound Code(s): XA1100 XA1650 XA2250 XA3850

Molecular Formula: $C_{10}H_{14}N_4O_4$
Molecular Weight: 254.245
Accurate Mass: 254.101506
Percentage Composition: C 47.24%; H 5.55%; N 22.04%; O 25.17%
Biological Use/Importance: Antihypertensive agent, diuretic, spasmolytic and antiasthmatic drug
Calculated Log P Data: Log P –1.71 (uncertain value) (calc)
Hazard & Toxicity: LD_{50} (mus, orl) 1954 mg/kg

Aldrich: D11940-7
Fluka: 37910
Sigma: D0633

>>**Variant:** (*R*)-form

CAS Registry Number: 72376-78-4
Molecular Formula: $C_{10}H_{14}N_4O_4$
Molecular Weight: 254.245
Accurate Mass: 254.101506
Percentage Composition: C 47.24%; H 5.55%; N 22.04%; O 25.17%
Physical Description: Cryst. (EtOH)
Melting Point: Mp 159-160°
Optical Rotation: $[\alpha]_D^{20}$+88.2 (c, 0.5 in H_2O)

>>**Derivative:** Di-Ac

Melting Point: Mp 125-126°
Optical Rotation: $[\alpha]_D^{20}$+73.9 (c, 0.5 in $CHCl_3$)

>>**Variant:** (±)-form

CAS Registry Number: 68350-70-9
Molecular Formula: $C_{10}H_{14}N_4O_4$
Molecular Weight: 254.245
Accurate Mass: 254.101506
Percentage Composition: C 47.24%; H 5.55%; N 22.04%; O 25.17%
Physical Description: Cryst. (EtOH)
Melting Point: Mp 158°

>>**Derivative:** Bis nicotinate
see Diniprofylline, BNV81-V

References: