



UV: [neutral] $\lambda_{\max}$ 228 (E1%/1cm 650); 258 (E1%/1cm 435); 430 (E1%/1cm 217) (MeOH) (Berdy) [base] $\lambda_{\max}$ 520 (E1%/1cm 152) (MeOH-NAOH) (Berdy)

>>Derivative: Demethoxy

Synonym(s): Medorubicin, INN. 4-Demethoxyadriamycin. NSC 256438

CAS Registry Number: 64314-52-9

Extra CAS Registry Numbers(s): 64363-63-9

Molecular Formula: C₂₆H₂₇NO₁₀

Molecular Weight: 513.5

Accurate Mass: 513.163499

Percentage Composition: C 60.82%; H 5.30%; N 2.73%; O 31.16%

Biological Use/Importance: Antineoplastic agent

Physical Description: Orange cryst. (as hydrochloride)

Melting Point: Mp 226-229 dec.° (hydrochloride)

Optical Rotation: $[\alpha]_D^{20}$ +190 (c, 0.042 in MeOH)

Calculated Log P Data: Log P -1.39 (uncertain value) (calc)

>>Derivative: 4'-O-(Tetrahydropyran-2-yl)

Synonym(s): 4'-O-(Tetrahydropyranyl)adriamycin. **Pirarubicin**, INN. Theprubicin. THP-ADM. THP-ADR

CAS Registry Number: 72496-41-4

Molecular Formula: C₃₂H₃₇NO₁₂

Molecular Weight: 627.644

Accurate Mass: 627.231579

Percentage Composition: C 61.24%; H 5.94%; N 2.23%; O 30.59%

Biological Use/Importance: Antineoplastic agent

Development Status: Launched 1988

Melting Point: Mp 188-192 dec.°

Optical Rotation: $[\alpha]_D^{25}$ +175 (c, 0.2 in CHCl₃)

Calculated Log P Data: Log P -0.06 (uncertain value) (calc)

Hazard & Toxicity: Adverse effects similar to Adriamycin when used therapeutically. LD₅₀ (mus, ivn) approx. 28 mg/kg