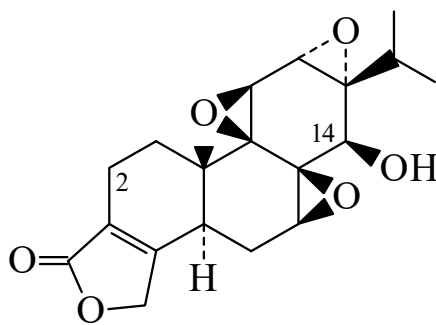




>>Entry Name: Triptolide



**CAS Registry Number:** 38748-32-2

**Related CAS Registry Numbers(s):** 73414-46-7 73543-06-3

**Molecular Formula:** C<sub>20</sub>H<sub>24</sub>O<sub>6</sub>

**Molecular Weight:** 360.406

**Accurate Mass:** 360.15729

**Percentage Composition:** C 66.65%; H 6.71%; O 26.64%

**Biological Source:** Constit. of *Tripterygium wilfordii*

**Biological Use/Importance:** Antineoplastic agent, effective against leukaemia and lung carcinoma

**Physical Description:** Cryst.

**Melting Point:** Mp 226-227°

**Optical Rotation:**  $[\alpha]_D^{25} -154$  (c, 0.369 in CH<sub>2</sub>Cl<sub>2</sub>)

**Calculated Log P Data:** Log P -0.6 (uncertain value) (calc)

**UV:** [neutral]  $\lambda_{\max}$  218 (ε 14000) (MeOH) (Berdy)

**Hazard & Toxicity:** LD<sub>50</sub> (mus, ipr) 0.9 mg/kg

>>Derivative: 14-Ketone

**Synonym(s):** Triptonide

**CAS Registry Number:** 38647-11-9

**Molecular Formula:** C<sub>20</sub>H<sub>22</sub>O<sub>6</sub>

**Molecular Weight:** 358.39

**Accurate Mass:** 358.14164

**Percentage Composition:** C 67.03%; H 6.19%; O 26.79%

**Biological Source:** Constit. of *Tripterygium wilfordii*

**Physical Description:** Cryst.

**Melting Point:** Mp 251-252°

**Optical Rotation:**  $[\alpha]_D^{25} -175$  (c, 0.148 in CH<sub>2</sub>Cl<sub>2</sub>)

**Calculated Log P Data:** Log P 0.85 (uncertain value) (calc)

**UV:** [neutral]  $\lambda_{\max}$  218 (ε 14000) (MeOH) (Derep) [neutral]  $\lambda_{\max}$  218 (ε 12000) (EtOH) (Berdy)

>>Derivative: 2β-Hydroxy

**Synonym(s):** Triptiolide

**CAS Registry Number:** 38647-10-8

**Molecular Formula:** C<sub>20</sub>H<sub>24</sub>O<sub>7</sub>

**Molecular Weight:** 376.405

**Accurate Mass:** 376.152205

**Percentage Composition:** C 63.82%; H 6.43%; O 29.75%

**Biological Source:** Isol. from *Tripterygium wilfordii*

**Biological Use/Importance:** Shows antileukaemic activity

**Melting Point:** Mp 210-211°

**Optical Rotation:**  $[\alpha]_D^{25} -138$  (c, 0.139 in CHCl<sub>3</sub>)

**Calculated Log P Data:** Log P -1.9 (uncertain value) (calc)

**UV:** [neutral]  $\lambda_{\max}$  218 (ε 14000) (MeOH) (Derep) [neutral]  $\lambda_{\max}$  217 (ε 12000) (MeOH) (Berdy)