



Molecular Formula: C₃₁H₄₀O₁₅
Molecular Weight: 652.648
Accurate Mass: 652.236725
Percentage Composition: C 57.05%; H 6.18%; O 36.77%
Biological Source: Constit. of *Carthamnus tinctorius*
Melting Point: Mp 115-116.5°
Optical Rotation: $[\alpha]_{\text{D}}^{18} -86.3$ (c, 0.5 in MeOH)
UV: [neutral] λ_{max} 229 (ϵ 6900); 280 (ϵ 2500) (MeOH)

>>**Derivative:** 4,4'-Di-*O*- β -D-glucopyranoside

CAS Registry Number: 38976-08-8

Molecular Formula: C₃₂H₄₂O₁₆
Molecular Weight: 682.674
Accurate Mass: 682.24729
Percentage Composition: C 56.30%; H 6.20%; O 37.50%
Biological Source: Constit. of *Trachelospermum asiaticum*
Physical Description: Powder
Melting Point: Mp 104-106°
Optical Rotation: $[\alpha]_{\text{D}}^{14} -24$ (c, 0.5 in EtOH)

>>**Derivative:** Di-Me ether

Synonym(s): Dihydro-3,4-bis[(3,4-dimethoxyphenyl)methyl]-2(3*H*)-furanone, 9Cl. Dihydro-3,4-diveratryl-2(3*H*)-furanone, 8Cl. **Maculatin**†. Dimethylmatairesinol. Arctigenin methyl ether

CAS Registry Number: 25488-59-9

Molecular Formula: C₂₂H₂₆O₆
Molecular Weight: 386.444
Accurate Mass: 386.17294
Percentage Composition: C 68.38%; H 6.78%; O 24.84%
Biological Source: Constit. of *Ptelea trifoliata*, *Cinnamomum camphora*, *Steganotaenia araliacea* and others
Physical Description: Prisms (MeOH)
Melting Point: Mp 129-131° (126-127°)
Optical Rotation: $[\alpha]_{\text{D}}^{25} -30$ (c, 1.3 in CHCl₃)

>>**Derivative:** 4-*O*-(6,7-Dihydroxy-3,7-dimethyl-2-octenyl)

CAS Registry Number: 160195-41-5

Molecular Formula: C₃₀H₄₀O₈
Molecular Weight: 528.641
Accurate Mass: 528.27232
Percentage Composition: C 68.16%; H 7.63%; O 24.21%
Biological Source: Constit. of *Haplophyllum ptilostylum*
Optical Rotation: $[\alpha]_{\text{D}} -18$ (c, 0.4 in CHCl₃)

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

CAS Registry Number: 148409-36-3

Molecular Formula: C₂₀H₂₂O₆
Molecular Weight: 358.39
Accurate Mass: 358.14164
Percentage Composition: C 67.03%; H 6.19%; O 26.79%
Biological Source: Constit. of *Selaginella doederleinii*
Optical Rotation: $[\alpha]_{\text{D}}^{20} +37$ (c, 1 in MeOH)
UV: [neutral] λ_{max} 233 (ϵ 8710); 283 (ϵ 5130) (MeOH) (Berdy) [base] λ_{max} 250 (); 298 () (MeOH-NAOH) (Berdy)

>>**Variant:** (±)-form

CAS Registry Number: 42298-55-5

Molecular Formula: C₂₀H₂₂O₆
Molecular Weight: 358.39
Accurate Mass: 358.14164
Percentage Composition: C 67.03%; H 6.19%; O 26.79%
Physical Description: Oil