Molecular Formula: $C_{31}H_{40}O_{15}$
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: $[\alpha]_D^{18}$ –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: $C_{32}H_{42}O_{16}$
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: $[\alpha]_D^{14}$ –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: $C_{22}H_{26}O_6$
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: $[\alpha]_D^{25}$ –30 (c, 1.3 in $CHCl_3$)

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

CAS Registry Number: 160195-41-5

Molecular Formula: $C_{30}H_{40}O_8$
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: $[\alpha]_D$ –18 (c, 0.4 in $CHCl_3$)

>>**Variant:** (+)-form
CAS Registry Number: 148409-36-3

Molecular Formula: $C_{20}H_{22}O_6$
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: $[\alpha]_D^{20}$ +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: $C_{20}H_{22}O_6$
Molecular Weight: 358.39
Accurate Mass: 358.14164
Percentage Composition: C 67.03%; H 6.19%; O 26.79%
Physical Description: Oil