



>>Derivative: Hexa-Me ether

CAS Registry Number: 23212-70-6

Molecular Formula: $C_{24}H_{32}O_8$

Molecular Weight: 448.512

Accurate Mass: 448.20972

Percentage Composition: C 64.27%; H 7.19%; O 28.54%

Physical Description: Cryst. (MeOH aq.)

Melting Point: Mp 158-160°

Optical Rotation: $[\alpha]_D^{28} -20.7$ (c, 0.58 in EtOH)

>>Variant: (7'S,8R,8'R)-form

Molecular Formula: $C_{18}H_{20}O_8$

Molecular Weight: 364.351

Accurate Mass: 364.11582

Percentage Composition: C 59.34%; H 5.53%; O 35.13%

>>Derivative: 3,3',5,5'-Tetra-Me ether

Synonym(s): 4,4',9,9'-Tetrahydroxy-3,3',5,5'-tetramethoxy-2,7'-cyclo lignan. **Lyoniresinol**. Dimethoxyisolariciresinol

CAS Registry Number: 14464-90-5

Molecular Formula: $C_{22}H_{28}O_8$

Molecular Weight: 420.458

Accurate Mass: 420.17842

Percentage Composition: C 62.85%; H 6.71%; O 30.44%

Biological Source: Isol. from *Tripetalia paniculata* and from *Quercus petraea*

Melting Point: Mp 115-116°. Mp 165-167° (dimorph.)

Optical Rotation: $[\alpha]_D +52$ (EtOH). $[\alpha]_D +13.3$ (c, 0.32 in MeOH)

>>Derivative: 3,3',5,5'-Tetra-Me ether, 9'-O-β-D-xylopyranoside

Synonym(s): **Lyoniside**. Lyonside

CAS Registry Number: 34425-25-7

Molecular Formula: $C_{27}H_{36}O_{12}$

Molecular Weight: 552.574

Accurate Mass: 552.22068

Percentage Composition: C 58.69%; H 6.57%; O 34.75%

Biological Source: Isol. from *Lyonia ovalifolia*, *Alnus glutinosa* and *Sorbus* spp.

Melting Point: Mp 124-125°. Mp 165-165° (dimorph.)

Optical Rotation: $[\alpha]_D +43$ (MeOH)

>>Derivative: 3,3',5,5'-Tetra-Me ether, 9-O-α-L-rhamnopyranoside

Molecular Formula: $C_{28}H_{38}O_{12}$

Molecular Weight: 566.601

Accurate Mass: 566.23633

Percentage Composition: C 59.36%; H 6.76%; O 33.89%

Biological Source: Obt. from heartwood of *Ulmus thomasi*

Physical Description: Amorph.

>>Derivative: 3,3',5,5'-Tetra-Me ether, 9-O-β-D-glucopyranoside

Molecular Formula: $C_{28}H_{38}O_{13}$

Molecular Weight: 582.6

Accurate Mass: 582.231245

Percentage Composition: C 57.73%; H 6.57%; O 35.70%

Biological Source: Constit. of the bark of *Aegle marmelos*

Physical Description: Amorph. solid

Optical Rotation: $[\alpha]_D^{27} -51.7$ (c, 0.41 in MeOH)

>>Derivative: 3,3',5,5'-Tetra-Me ether, 9'-O-β-D-glucopyranoside

CAS Registry Number: 87585-32-8