



CAS Registry Number: 110808-30-5

Molecular Formula: C₂₃H₂₈O₁₀S₂

Molecular Weight: 528.6

Accurate Mass: 528.11239

Percentage Composition: C 52.26%; H 5.34%; O 30.27%; S 12.13%

Physical Description: Syrup

Optical Rotation: $[\alpha]_D^{21} +30.8$ (c, 1 in CHCl₃)

>>Variant: α-D-Furanose-form

Molecular Formula: C₆H₁₂O₆

Molecular Weight: 180.157

Accurate Mass: 180.06339

Percentage Composition: C 40.00%; H 6.71%; O 53.28%

>>Derivative: 2',3,5-Tris(3,4,5-trihydroxybenzoyl)

Synonym(s): 2',3,5-Tri-*O*-galloyl-α-D-hamamelofuranose

Molecular Formula: C₂₇H₂₄O₁₈

Molecular Weight: 636.476

Accurate Mass: 636.09627

Percentage Composition: C 50.95%; H 3.80%; O 45.25%

Biological Source: Constit. of *Hamamelis virginiana* (Hamamelidaceae)

>>Derivative: 4-Hydroxybenzoyl glycoside, 2',3,5-tris(3,4,5-trihydroxybenzoyl)

Molecular Formula: C₃₄H₂₈O₂₀

Molecular Weight: 756.583

Accurate Mass: 756.1174

Percentage Composition: C 53.98%; H 3.73%; O 42.29%

Biological Source: Constit. of *Hamamelis virginiana* (Hamamelidaceae)

>>Variant: β-D-Furanose-form

Molecular Formula: C₆H₁₂O₆

Molecular Weight: 180.157

Accurate Mass: 180.06339

Percentage Composition: C 40.00%; H 6.71%; O 53.28%

>>Derivative: Me glycoside, 2,3-*O*-isopropylidene

Synonym(s): Methyl 2-*C*-hydroxymethyl-2,3-*O*-isopropylidene-β-D-ribofuranoside

Molecular Formula: C₁₀H₁₈O₆

Molecular Weight: 234.249

Accurate Mass: 234.11034

Percentage Composition: C 51.27%; H 7.74%; O 40.98%

Physical Description: Cryst. (C₆H₆)

Melting Point: Mp 117-120°

Optical Rotation: $[\alpha]_D -61$ (c, 0.6 in CHCl₃)

>>Derivative: 2',5-Bis(3,4,5-trihydroxybenzoyl)

Synonym(s): 2',5-Digalloylhamamelofuranose. **Hamamelitannin**

CAS Registry Number: 469-32-9

Molecular Formula: C₂₀H₂₀O₁₄

Molecular Weight: 484.37

Accurate Mass: 484.08531

Percentage Composition: C 49.59%; H 4.16%; O 46.24%

Biological Source: Tannin from witch hazel *Hamamelis virginiana*. Also in *Quercus rubra* and *Castanea sativa*

Physical Description: Prisms or needles + ½H₂O (H₂O)

Melting Point: Mp 146-147°

Optical Rotation: $[\alpha]_D^{19} +33$ (c, 1.24 in H₂O)