



CAS Registry Number: 126622-78-4

Molecular Formula: C₂₁H₂₂O₁₅

Molecular Weight: 514.396

Accurate Mass: 514.095875

Percentage Composition: C 49.03%; H 4.31%; O 46.65%

Biological Source: Constit. of *Cornus officinalis*

Physical Description: Light-tan amorph. powder + 2H₂O

Optical Rotation: $[\alpha]_D^{20} +0.4$ (c, 0.8 in MeOH)

>>**Derivative:** 7-(3,4-Dihydroxy-*E*-cinnamoyl)

Synonym(s): 7-*O*-Caffeoylsedoheptulose

CAS Registry Number: 288141-05-9

Molecular Formula: C₁₆H₂₀O₁₀

Molecular Weight: 372.328

Accurate Mass: 372.10565

Percentage Composition: C 51.61%; H 5.41%; O 42.97%

Biological Source: Constit. of the wood of *Nyssa sylvatica*

Physical Description: Amorph. powder

Optical Rotation: $[\alpha]_D^{25} +13.9$ (c, 0.42 in MeOH)

>>**Variant:** β-D-Pyranose-form

Molecular Formula: C₇H₁₄O₇

Molecular Weight: 210.183

Accurate Mass: 210.073955

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

>>**Derivative:** 2,7-Anhydro

Synonym(s): 2,7-Anhydro-β-D-*altro*-2-heptulopyranose. Sedoheptulosan

CAS Registry Number: 469-90-9

Molecular Formula: C₇H₁₂O₆

Molecular Weight: 192.168

Accurate Mass: 192.06339

Percentage Composition: C 43.75%; H 6.29%; O 49.95%

Source/Synthesis: Formed in equilib. with sedoheptulose in aq. acid soln. (80-90% anhydride)

Melting Point: Mp 155-156°

Optical Rotation: $[\alpha]_D^{20} -146$ (H₂O)

Sigma: S3375

>>**Derivative:** 2,7-Anhydro, monohydrate

Melting Point: Mp 101-102°

Optical Rotation: $[\alpha]_D^{20} -134$ (H₂O)

>>**Derivative:** 2,7-Anhydro, 4,5-*O*-isopropylidene

Synonym(s): 2,7-Anhydro-4,5-*O*-isopropylidene-β-D-*altro*-2-heptulopyranose

CAS Registry Number: 43139-45-3

Molecular Formula: C₁₀H₁₆O₆

Molecular Weight: 232.233

Accurate Mass: 232.09469

Percentage Composition: C 51.72%; H 6.94%; O 41.34%

Melting Point: Mp 226-227°

Optical Rotation: $[\alpha]_D^{20} -124$ (c, 0.9 in H₂O)