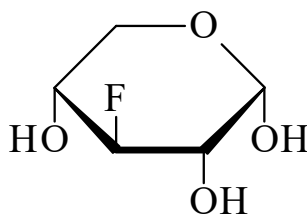




>>Entry Name: 3-Deoxy-3-fluoroxyllose



α -D-Pyranose-form

Molecular Formula: C₅H₉FO₄

Molecular Weight: 152.122

Accurate Mass: 152.048488

Percentage Composition: C 39.48%; H 5.96%; F 12.49%; O 42.07%

>>Variant: D-form

CAS Registry Number: 14537-01-0

Molecular Formula: C₅H₉FO₄

Molecular Weight: 152.122

Accurate Mass: 152.048488

Percentage Composition: C 39.48%; H 5.96%; F 12.49%; O 42.07%

Physical Description: Needles (EtOH/butanol)

Melting Point: Mp 126-128°

Optical Rotation: [α]_D²⁵ +75 → +26 (c, 1.7 in H₂O)

>>Derivative: 2,5-Dichlorophenylhydrazone

CAS Registry Number: 14537-02-1

Physical Description: Cryst. (MeOH aq.)

Melting Point: Mp 75°

>>Variant: α -D-Furanose-form

Molecular Formula: C₅H₉FO₄

Molecular Weight: 152.122

Accurate Mass: 152.048488

Percentage Composition: C 39.48%; H 5.96%; F 12.49%; O 42.07%

>>Derivative: 5-Benzoyl, 1,2-di-Ac

Synonym(s): 1,2-Di-*O*-acetyl-5-*O*-benzoyl-3-deoxy-3-fluoro- α -D-xylofuranose

CAS Registry Number: 159099-24-8

Molecular Formula: C₁₆H₁₇FO₇

Molecular Weight: 340.304

Accurate Mass: 340.095833

Percentage Composition: C 56.47%; H 5.03%; F 5.58%; O 32.91%

Physical Description: Cryst. (heptane/Et₂O)

Melting Point: Mp 63-64°

Other Data: α : β anomeric ratio =5:1

>>Derivative: 1,2-Isopropylidene, 5-benzoyl

Synonym(s): 5-*O*-Benzoyl-3-deoxy-3-fluoro-1,2-*O*-isopropylidene- α -D-xylofuranose

CAS Registry Number: 125291-12-5

Molecular Formula: C₁₅H₁₇FO₅

Molecular Weight: 296.295

Accurate Mass: 296.106003

Percentage Composition: C 60.81%; H 5.78%; F 6.41%; O 27.00%

Physical Description: Oil

References:

Wright, J.A., *Methods Carbohydr. Chem.*, 1972, **6**, 201, (*synth*)

Gosselin, G. *et al.*, *Carbohydr. Res.*, 1993, **249**, 1, (*synth, pmr, F-19 nmr*)

Jeong, L.S. *et al.*, *Carbohydr. Res.*, 1994, **262**, 103, (*1,2-Isopropylidene-5-benzoyl*)