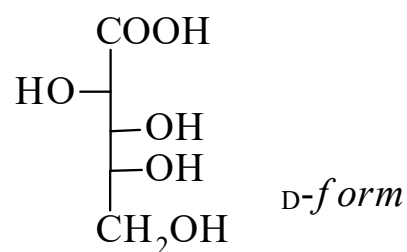




>>Entry Name: Arabinonic acid

Synonym(s): Arabonic acid



Molecular Formula: C₅H₁₀O₆

Molecular Weight: 166.13

Accurate Mass: 166.04774

Percentage Composition: C 36.15%; H 6.07%; O 57.78%

>>Variant: D-form

CAS Registry Number: 488-30-2

Molecular Formula: C₅H₁₀O₆

Molecular Weight: 166.13

Accurate Mass: 166.04774

Percentage Composition: C 36.15%; H 6.07%; O 57.78%

Source/Synthesis: Readily obt. by oxidn. of Arabinose [BWQ11-M](#)

Melting Point: Mp 114-116°

Optical Rotation: [α]_D +18.6 → +48.6 (H₂O)

>>Derivative: Ca salt

CAS Registry Number: 22373-09-7

Optical Rotation: [α]_D²⁰ -171 (ammonium molybdate soln.)

>>Derivative: Et ester

Synonym(s): Ethyl D-arabinonate

Molecular Formula: C₇H₁₄O₆

Molecular Weight: 194.184

Accurate Mass: 194.07904

Percentage Composition: C 43.30%; H 7.27%; O 49.44%

Melting Point: Mp 132-133°

Optical Rotation: [α]_D²⁵ 0 (c, 2.0 in CHCl₃)

>>Derivative: Butyl ester

Synonym(s): Butyl D-arabinonate

Molecular Formula: C₉H₁₈O₆

Molecular Weight: 222.238

Accurate Mass: 222.11034

Percentage Composition: C 48.64%; H 8.16%; O 43.20%

Melting Point: Mp 104-105°

Optical Rotation: [α]_D²⁵ -3 (c, 2.0 in CHCl₃)

>>Derivative: 2,3,4,5-Tetra-Ac, Et ester

Synonym(s): Ethyl 2,3,4,5-tetra-*O*-acetyl-D-arabinonate

Molecular Formula: C₁₅H₂₂O₁₀

Molecular Weight: 362.333

Accurate Mass: 362.1213

Percentage Composition: C 49.72%; H 6.12%; O 44.16%

Melting Point: Mp 111°

Optical Rotation: [α]_D²⁵ +34 (c, 2.0 in CHCl₃)