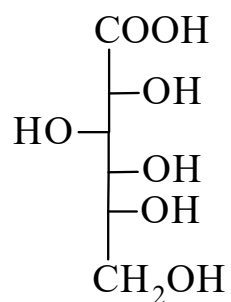




>>Entry Name: Gluconic acid, 9Cl, 8Cl

ENTRY UNDER REVIEW

Synonym(s): *gluco*-Hexonic acid



CAS Registry Number: 133-42-6

Related CAS Registry Numbers(s): 299-27-4 527-07-1 921-62-0 18016-24-5 57775-17-4

Molecular Formula: C₆H₁₂O₇

Molecular Weight: 196.157

Accurate Mass: 196.058305

Percentage Composition: C 36.74%; H 6.17%; O 57.10%

>>Variant: D-form

CAS Registry Number: 526-95-4

Molecular Formula: C₆H₁₂O₇

Molecular Weight: 196.157

Accurate Mass: 196.058305

Percentage Composition: C 36.74%; H 6.17%; O 57.10%

Source/Synthesis: V. inexpensive synth. starting material available on industrial scale

Use/Importance: Used as an aq. soln. for photometric detn. of Mn

Physical Description: Needles

Melting Point: Mp 130-132°

Optical Rotation: $[\alpha]_{\text{D}}^{20} -6.7 \rightarrow +11.7$ (H₂O, 5 d)

Solubility: Sol. H₂O

pKa Value: pK_a 3.76 (17°)

Aldrich: G195-1

Fluka: 49110

Sigma: G1139

>>Derivative: Na salt

CAS Registry Number: 14906-97-9

Extra CAS Registry Numbers(s): 527-07-1

Melting Point: Mp 206 dec.°

Optical Rotation: $[\alpha]_{\text{D}}^{23} +12.1$ (c, 1.75 in H₂O)

>>Derivative: K salt

CAS Registry Number: 299-27-4

Melting Point: Mp 183 dec.°

Optical Rotation: $[\alpha]_{\text{D}}^{20} +11.7$ (c, 1.2 in H₂O)

Aldrich: 86037-9

Fluka: 60245

Sigma: G4500

>>Derivative: Mg salt

CAS Registry Number: 3632-91-5

Physical Description: Hydrate

Melting Point: Mp 200 dec.°

Optical Rotation: $[\alpha]_{\text{D}}^{20} +11$ (c, 1.8 in H₂O)

Sigma: G9130