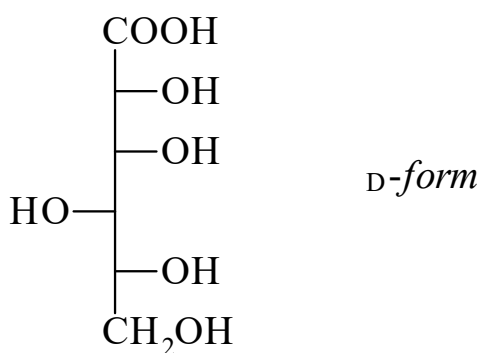




>>Entry Name: Gulonic acid, 9Cl, 8Cl

Synonym(s): *gulo*-Hexonic acid



CAS Registry Number: 20246-53-1

Related CAS Registry Numbers(s): 3327-64-8

Molecular Formula: C<sub>6</sub>H<sub>12</sub>O<sub>7</sub>

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: 20246-33-7

Molecular Formula: C<sub>6</sub>H<sub>12</sub>O<sub>7</sub>

Molecular Weight: 196.157

Accurate Mass: 196.058305

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

Optical Rotation: [α]<sub>D</sub> −1.6 (H<sub>2</sub>O)

Other Data: Forms the 1,4-lactone spontaneously

>>Derivative: Ca salt

Optical Rotation: [α]<sub>D</sub><sup>16</sup> −14.5 (c, 1.73 in H<sub>2</sub>O)

>>Derivative: Phenylhydrazide

Melting Point: Mp 147-149° (142-144° dec.)

Optical Rotation: [α]<sub>D</sub><sup>20</sup> +13.45 (H<sub>2</sub>O). [α]<sub>D</sub><sup>16</sup> +30.6 (H<sub>2</sub>O)

>>Derivative: Amide

Synonym(s): D-Gulonamide

Molecular Formula: C<sub>6</sub>H<sub>13</sub>NO<sub>6</sub>

Molecular Weight: 195.172

Accurate Mass: 195.074289

Percentage Composition: C 36.92%; H 6.71%; N 7.18%; O 49.19%

Melting Point: Mp 122-123°

Optical Rotation: [α]<sub>D</sub><sup>20</sup> +15.2 (H<sub>2</sub>O)

>>Derivative: 1,4-Lactone

Synonym(s): D-Gulono-1,4-lactone. D-*gulo*-Hexono-1,4-lactone

CAS Registry Number: 6322-07-2

Molecular Formula: C<sub>6</sub>H<sub>10</sub>O<sub>6</sub>

Molecular Weight: 178.141

Accurate Mass: 178.04774

Percentage Composition: C 40.45%; H 5.66%; O 53.89%

Physical Description: Prisms

Melting Point: Mp 182-185°

Optical Rotation: [α]<sub>D</sub><sup>20</sup> −57.1 (H<sub>2</sub>O)

Aldrich: 21935-5

Fluka: 51190

Sigma: G0504