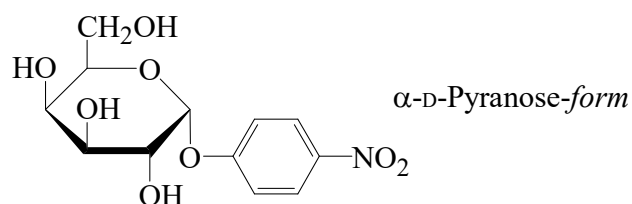




>>Entry Name: 4-Nitrophenyl galactoside, 9CI



**Molecular Formula:** C<sub>12</sub>H<sub>15</sub>NO<sub>8</sub>

**Molecular Weight:** 301.252

**Accurate Mass:** 301.079769

**Percentage Composition:** C 47.84%; H 5.02%; N 4.65%; O 42.49%

**Sigma:** N1252

>>Variant: α-D-Pyranose-form

**CAS Registry Number:** 7493-95-0

**Molecular Formula:** C<sub>12</sub>H<sub>15</sub>NO<sub>8</sub>

**Molecular Weight:** 301.252

**Accurate Mass:** 301.079769

**Percentage Composition:** C 47.84%; H 5.02%; N 4.65%; O 42.49%

**Physical Description:** Cryst. (EtOH)

**Melting Point:** Mp 170-171°

**Optical Rotation:** [α]<sub>D</sub> +220 (c, 0.4 in H<sub>2</sub>O)

>>Derivative: Tetra-Ac

**CAS Registry Number:** 17042-39-6

**Molecular Formula:** C<sub>20</sub>H<sub>23</sub>NO<sub>12</sub>

**Molecular Weight:** 469.401

**Accurate Mass:** 469.122029

**Percentage Composition:** C 51.18%; H 4.94%; N 2.98%; O 40.90%

**Physical Description:** Cryst. (EtOH)

**Melting Point:** Mp 132-133°

**Optical Rotation:** [α]<sub>D</sub> +204 (c, 0.68 in CHCl<sub>3</sub>)

>>Variant: β-D-Pyranose-form

**CAS Registry Number:** 3150-24-1

**Molecular Formula:** C<sub>12</sub>H<sub>15</sub>NO<sub>8</sub>

**Molecular Weight:** 301.252

**Accurate Mass:** 301.079769

**Percentage Composition:** C 47.84%; H 5.02%; N 4.65%; O 42.49%

**Use/Importance:** Substrate for detn. of β-galactosidase activity using uv monitoring of 4-nitrophenol release

**Physical Description:** Cryst. (hydrate)

**Melting Point:** Mp 181-182° (hydrate)

**Optical Rotation:** [α]<sub>D</sub><sup>22</sup> -84 (c, 0.3 in H<sub>2</sub>O)

>>Derivative: Tetra-Ac

**CAS Registry Number:** 2872-66-4

**Molecular Formula:** C<sub>20</sub>H<sub>23</sub>NO<sub>12</sub>

**Molecular Weight:** 469.401

**Accurate Mass:** 469.122029

**Percentage Composition:** C 51.18%; H 4.94%; N 2.98%; O 40.90%

**Physical Description:** Cryst.

**Melting Point:** Mp 145-146°

**Optical Rotation:** [α]<sub>D</sub><sup>22</sup> -10 (c, 2 in CHCl<sub>3</sub>)

**References:**