



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

**Melting Point:** Mp 81-82°

**Optical Rotation:**  $[\alpha]_D^{25} +34$  (c, 1 in CHCl<sub>3</sub>)

>>**Derivative:** 4,6-*O*-Benzylidene

**Synonym(s):** Benzyl 4,6-*O*-benzylidene- $\alpha$ -D-mannopyranoside

**CAS Registry Number:** 40983-94-6

**Molecular Formula:** C<sub>20</sub>H<sub>22</sub>O<sub>6</sub>

**Molecular Weight:** 358.39

**Accurate Mass:** 358.14164

**Percentage Composition:** C 67.03%; H 6.19%; O 26.79%

**Physical Description:** Prismatic needles (CH<sub>2</sub>Cl<sub>2</sub>/C<sub>6</sub>H<sub>6</sub>)

**Melting Point:** Mp 147-148°

**Optical Rotation:**  $[\alpha]_D^{25} +79$  (c, 1.2 in CHCl<sub>3</sub>)

>>**Derivative:** 2,3:4,6-Di-*O*-benzylidene

**Synonym(s):** Benzyl 2,3:4,6-di-*O*-benzylidene- $\alpha$ -D-mannopyranoside

**CAS Registry Number:** 58650-53-6

**Molecular Formula:** C<sub>27</sub>H<sub>26</sub>O<sub>6</sub>

**Molecular Weight:** 446.499

**Accurate Mass:** 446.17294

**Percentage Composition:** C 72.63%; H 5.87%; O 21.50%

**Physical Description:** Cryst. (CH<sub>2</sub>Cl<sub>2</sub>/pentane)

**Melting Point:** Mp 174-176°

**Optical Rotation:**  $[\alpha]_D^{25} +34$  (c, 1.0 in CHCl<sub>3</sub>)

>>**Derivative:** 4-Me, 2,3,6-tri-Ac

**Synonym(s):** Benzyl 2,3,6-tri-*O*-acetyl-4-*O*-methyl- $\alpha$ -D-mannopyranoside

**CAS Registry Number:** 53691-36-4

**Molecular Formula:** C<sub>20</sub>H<sub>26</sub>O<sub>9</sub>

**Molecular Weight:** 410.42

**Accurate Mass:** 410.157685

**Percentage Composition:** C 58.53%; H 6.39%; O 35.08%

**Melting Point:** Mp 79-81°

**Optical Rotation:**  $[\alpha]_D +66$  (c, 0.66 in CHCl<sub>3</sub>)

>>**Derivative:** 4-Me

**Synonym(s):** Benzyl 4-*O*-methyl- $\alpha$ -D-mannopyranoside

**CAS Registry Number:** 53691-37-5

**Molecular Formula:** C<sub>14</sub>H<sub>20</sub>O<sub>6</sub>

**Molecular Weight:** 284.308

**Accurate Mass:** 284.12599

**Percentage Composition:** C 59.14%; H 7.09%; O 33.76%

**Physical Description:** Syrup

**Optical Rotation:**  $[\alpha]_D +75$  (c, 0.85 in EtOH)

>>**Derivative:** 2-Benzyl, 4,6-*O*-benzylidene

**Synonym(s):** Benzyl 2-*O*-benzyl-4,6-*O*-benzylidene- $\alpha$ -D-mannopyranoside

**CAS Registry Number:** 40983-95-7

**Molecular Formula:** C<sub>27</sub>H<sub>28</sub>O<sub>6</sub>

**Molecular Weight:** 448.515

**Accurate Mass:** 448.18859

**Percentage Composition:** C 72.30%; H 6.29%; O 21.40%

**Melting Point:** Mp 97-99°

**Optical Rotation:**  $[\alpha]_D +39$  (c, 0.3 in CHCl<sub>3</sub>)