



**Melting Point:** Mp 119°  
**Optical Rotation:**  $[\alpha]_D^{20} +48$  (c, 0.8 in CHCl<sub>3</sub>)

>>**Variant:** β-D-Pyranose-form

**CAS Registry Number:** 49858-49-3  
**Molecular Formula:** C<sub>6</sub>H<sub>12</sub>O<sub>5</sub>S  
**Molecular Weight:** 196.224  
**Accurate Mass:** 196.040545  
**Percentage Composition:** C 36.73%; H 6.16%; O 40.77%; S 16.34%

>>**Derivative:** Me glycoside  
**Synonym(s):** Methyl 1-thio-β-D-galactopyranoside

**CAS Registry Number:** 155-30-6

**Molecular Formula:** C<sub>7</sub>H<sub>14</sub>O<sub>5</sub>S  
**Molecular Weight:** 210.251  
**Accurate Mass:** 210.056195  
**Percentage Composition:** C 39.99%; H 6.71%; O 38.05%; S 15.25%  
**Physical Description:** Cryst. (EtOH)  
**Melting Point:** Mp 174-175°  
**Optical Rotation:**  $[\alpha]_D^{20} +11$  (H<sub>2</sub>O)  
**Sigma:** M7627

>>**Derivative:** Me glycoside, tetra-Ac  
**Synonym(s):** Methyl 2,3,4,6-tetra-*O*-acetyl-1-thio-β-D-galactopyranoside

**CAS Registry Number:** 55722-48-0

**Molecular Formula:** C<sub>15</sub>H<sub>22</sub>O<sub>9</sub>S  
**Molecular Weight:** 378.399  
**Accurate Mass:** 378.098455  
**Percentage Composition:** C 47.61%; H 5.86%; O 38.05%; S 8.47%  
**Physical Description:** Needles (EtOH)  
**Melting Point:** Mp 108°  
**Optical Rotation:**  $[\alpha]_D^{17} +3$  (CHCl<sub>3</sub>)

>>**Derivative:** Et glycoside  
**Synonym(s):** Ethyl 1-thio-β-D-galactopyranoside

**CAS Registry Number:** 56245-60-4

**Molecular Formula:** C<sub>8</sub>H<sub>16</sub>O<sub>5</sub>S  
**Molecular Weight:** 224.277  
**Accurate Mass:** 224.071845  
**Percentage Composition:** C 42.84%; H 7.19%; O 35.67%; S 14.30%  
**Physical Description:** Cryst. (EtOH/EtOAc)  
**Melting Point:** Mp 122°  
**Optical Rotation:**  $[\alpha]_D^{26} -24$  (c, 0.9 in H<sub>2</sub>O)

>>**Derivative:** Et glycoside, tetra-Ac  
**Synonym(s):** Ethyl 2,3,4,6-tetra-*O*-acetyl-1-thio-β-D-galactopyranoside

**CAS Registry Number:** 55722-49-1

**Molecular Formula:** C<sub>16</sub>H<sub>24</sub>O<sub>9</sub>S  
**Molecular Weight:** 392.426  
**Accurate Mass:** 392.114105  
**Percentage Composition:** C 48.97%; H 6.16%; O 36.69%; S 8.17%  
**Melting Point:** Mp 74-75°  
**Optical Rotation:**  $[\alpha]_D^{26} -8$  (c, 2.1 in CHCl<sub>3</sub>)