



**Molecular Formula:** C<sub>21</sub>H<sub>20</sub>O<sub>12</sub>  
**Molecular Weight:** 464.382  
**Accurate Mass:** 464.09548  
**Percentage Composition:** C 54.32%; H 4.34%; O 41.34%  
**Biological Source:** Isol. from *Betula middendorfii*  
**Melting Point:** Mp 235-238°  
**Optical Rotation:** [ $\alpha$ ]<sub>D</sub> -84 (c, 0.51 in formamide)  
**Other Data:** Note confusing duplication of the name Isohyperoside

>>Derivative: 3-O- $\alpha$ -D-Galactopyranoside  
Synonym(s): Isohyperoside‡

CAS Registry Number: 65549-68-0

**Molecular Formula:** C<sub>21</sub>H<sub>20</sub>O<sub>12</sub>  
**Molecular Weight:** 464.382  
**Accurate Mass:** 464.09548  
**Percentage Composition:** C 54.32%; H 4.34%; O 41.34%  
**Biological Source:** Isol. from *Rhododendron dauricum*  
**Other Data:** Note confusing duplication of the name Isohyperoside

>>Derivative: 7-O- $\alpha$ -D-Galactopyranoside

CAS Registry Number: 36450-05-2

**Molecular Formula:** C<sub>21</sub>H<sub>20</sub>O<sub>12</sub>  
**Molecular Weight:** 464.382  
**Accurate Mass:** 464.09548  
**Percentage Composition:** C 54.32%; H 4.34%; O 41.34%  
**Biological Source:** Isol. from *Athamanta macrophylla*

>>Derivative: 7-O- $\beta$ -D-Galactopyranoside  
Synonym(s): Quercetin 7-galactoside. **Coptiside II**

CAS Registry Number: 59985-52-3

**Molecular Formula:** C<sub>21</sub>H<sub>20</sub>O<sub>12</sub>  
**Molecular Weight:** 464.382  
**Accurate Mass:** 464.09548  
**Percentage Composition:** C 54.32%; H 4.34%; O 41.34%  
**Biological Source:** Constit. of leaves of *Coptis japonica*  
**Physical Description:** Yellow amorph. powder (MeOH)  
**Melting Point:** Mp 243-244°  
**Optical Rotation:** [ $\alpha$ ]<sub>D</sub><sup>25</sup> -96 (c, 1 in Py)

>>Derivative: 3-O- $\beta$ -D-Glucuronopyranoside  
Synonym(s): Quercetin 3-glucuronide. **Miquelianin**. Querciturone

CAS Registry Number: 22688-79-5

**Molecular Formula:** C<sub>21</sub>H<sub>18</sub>O<sub>13</sub>  
**Molecular Weight:** 478.365  
**Accurate Mass:** 478.074745  
**Percentage Composition:** C 52.73%; H 3.79%; O 43.48%  
**Biological Source:** Isol. from *Gaultheria miqueliana* and many other plant spp. Present in red wine  
**Physical Description:** Yellow needles (MeOH aq.)  
**Melting Point:** Mp 193-195° (190-191°)  
**Optical Rotation:** [ $\alpha$ ]<sub>D</sub><sup>30</sup> -48.2 (c, 0.835 in Py aq.)