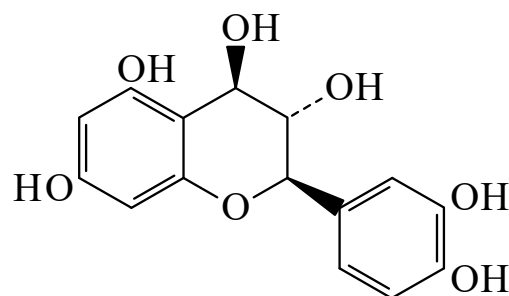




**>>Entry Name: 3,3',4,4',5,7-Hexahydroxyflavan**

**Synonym(s):** 2-(3,4-Dihydroxyphenyl)-3,4-dihydro-2*H*-benzopyran-3,4,5,7-tetrol, 9Cl. **Leucocyanidin.** Leucanthocyanidol. Leucocyanidol. Leucocianidol, INN. Pygnoforton. Pyknogenol. Procyanidol



(2*R*,3*S*,4*R*)-form

**CAS Registry Number:** 480-17-1

**Related CAS Registry Numbers(s):** 15963-96-9 17912-82-2 20408-92-8 29913-80-2 29913-81-3 98856-47-4 104371-01-9

**Molecular Formula:** C<sub>15</sub>H<sub>14</sub>O<sub>7</sub>

**Molecular Weight:** 306.271

**Accurate Mass:** 306.073955

**Percentage Composition:** C 58.83%; H 4.61%; O 36.57%

**Biological Source:** Occurs in many plants, e.g. detected in a wide range of conifer woods

**Use/Importance:** Important in chem. and biochemistry of the condensed tannin procyanidins; antihemorrhagic, vitamin P factor

**UV:** [neutral] λ<sub>max</sub> 285 ( ) (MeOH) (Berdy)

**Other Data:** Stereochem. of naturally occurring isomers has not been fully worked out

**>>Variant: (2*R*,3*S*,4*R*)-form**

**CAS Registry Number:** 69256-15-1

**Molecular Formula:** C<sub>15</sub>H<sub>14</sub>O<sub>7</sub>

**Molecular Weight:** 306.271

**Accurate Mass:** 306.073955

**Percentage Composition:** C 58.83%; H 4.61%; O 36.57%

**Physical Description:** Cryst. +2H<sub>2</sub>O(H<sub>2</sub>O)

**Optical Rotation:** [α]<sub>D</sub><sup>25</sup> +20.6 (c, 0.24 in MeOH aq.)

**Other Data:** Discolours at 125°; dec. to maroon solid by 170°

**>>Variant: (2*R*,3*S*,4*S*)-form**

**CAS Registry Number:** 93527-39-0

**Molecular Formula:** C<sub>15</sub>H<sub>14</sub>O<sub>7</sub>

**Molecular Weight:** 306.271

**Accurate Mass:** 306.073955

**Percentage Composition:** C 58.83%; H 4.61%; O 36.57%

**Source/Synthesis:** Enzymic reduction prod. of 3,3',4',5,7-Pentahydroxyflavanone [CNL06-P](#)

**Optical Rotation:** [α]<sub>D</sub> +34 (CHCl<sub>3</sub>)

**>>Variant: (2ξ,3ξ,4ξ)-form**

**Molecular Formula:** C<sub>15</sub>H<sub>14</sub>O<sub>7</sub>

**Molecular Weight:** 306.271

**Accurate Mass:** 306.073955

**Percentage Composition:** C 58.83%; H 4.61%; O 36.57%

**>>Derivative: Hexa-Ac**

**CAS Registry Number:** 15885-46-8

**Molecular Formula:** C<sub>27</sub>H<sub>26</sub>O<sub>13</sub>

**Molecular Weight:** 558.495

**Percentage Composition:** C 58.07%; H 4.69%; O 37.24%

**Melting Point:** Mp 142-144°