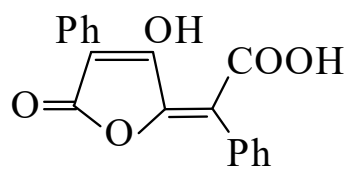




>>>Entry Name: **Pulvinic acid**

**Synonym(s):**  $\alpha$ -(3-Hydroxy-5-oxo-4-phenyl-2(5*H*)-furanlydene)benzeneacetic acid, 9Cl. Pulvic acid



**CAS Registry Number:** 26548-70-9

**Molecular Formula:** C<sub>18</sub>H<sub>12</sub>O<sub>5</sub>

**Molecular Weight:** 308.29

**Accurate Mass:** 308.068475

**Percentage Composition:** C 70.13%; H 3.92%; O 25.95%

**Biological Source:** Pigment from various lichen spp.

**Physical Description:** Orange powder (Et<sub>2</sub>O or CHCl<sub>3</sub>), orange prisms (C<sub>6</sub>H<sub>6</sub>)

**Melting Point:** Mp 216-217°

**Solubility:** V. sol. EtOH; sol. H<sub>2</sub>O; spar. sol. Et<sub>2</sub>O, CHCl<sub>3</sub>

**Other Data:** Forms solvates with MeOH, EtOH

>>>Derivative: Me ester

**Synonym(s):** **Vulpinic acid.** Vulpic acid. Methylpulvinic acid

**CAS Registry Number:** 521-52-8

**Molecular Formula:** C<sub>19</sub>H<sub>14</sub>O<sub>5</sub>

**Molecular Weight:** 322.317

**Accurate Mass:** 322.084125

**Percentage Composition:** C 70.80%; H 4.38%; O 24.82%

**Biological Source:** Occurs in many lichens, e.g. *Letharia vulpina*

**Use/Importance:** Antibacterial agent, plant growth inhibitor

**Physical Description:** Yellow plates (MeOH), needles or prisms (Et<sub>2</sub>O)

**Melting Point:** Mp 145-146°

**Solubility:** BERDY SOL: Sol. MeOH, Et<sub>2</sub>O; fairly sol. C<sub>6</sub>H<sub>6</sub>; poorly sol. H<sub>2</sub>O

**UV:** [neutral]  $\lambda_{\max}$  371 () (MeOH) (Berdy)

**Other Data:** Strong acid reacr., forms water sol. salts

**Sigma:** V1127

>>>Derivative: Me ester, Ac

**Physical Description:** Needles

**Melting Point:** Mp 156° (148°)

>>>Derivative: Me ester, Me ether

**CAS Registry Number:** 22628-22-4

**Physical Description:** Needles (EtOH)

**Melting Point:** Mp 143-144°

>>>Derivative: Et ester

**Synonym(s):** Callopismic acid. Ethylpulvinic acid

**Molecular Formula:** C<sub>20</sub>H<sub>16</sub>O<sub>5</sub>

**Molecular Weight:** 336.343

**Accurate Mass:** 336.099775

**Percentage Composition:** C 71.42%; H 4.79%; O 23.78%

**Physical Description:** Yellow tablets (EtOH)

**Melting Point:** Mp 127-128°

**Other Data:** Artifact from use of EtOH during isoln. Forms Pulvinic acid lactone on heating