**PRODUCT INFORMATION**

**Quercetin**  
*Item No. 10005169*

**CAS Registry No.:** 117-39-5  
**Formal Name:** 2-(3,4-dihydroxyphenyl)-3,5,7-trihydroxy-4H-1-benzopyran-4-one  
**MF:** C_{15}H_{10}O_{7}  
**FW:** 302.2  
**Purity:** ≥95%  
**UV/Vis.:** \( \lambda_{\text{max}} \) 256, 368 nm  
**Supplied as:** A crystalline solid  
**Storage:** Room temperature  
**Stability:** As supplied, 2 years from the QC date provided on the Certificate of Analysis, when stored properly

### Laboratory Procedures

Quercetin is supplied as a crystalline solid. A stock solution may be made by dissolving the quercetin in the solvent purged with an inert gas. Quercetin is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of quercetin in these solvents is approximately 2 mg/ml in ethanol and 30 mg/ml in DMSO and DMF.

Quercetin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, quercetin should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Quercetin has a solubility of approximately 1 mg/ml in a 1:4 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Quercetin is a flavonoid compound found in many fruits, vegetables, leaves, and grains that scavenges free radicals to reduce oxidation.\(^1\) The estimated human normal dietary intake of quercetin, primarily as glycosides, is 0.1-0.2 mg/kg.\(^2\) Quercetin is present in much greater amounts in nutritional supplements. Quercetin is carcinogenic in male rats, inducing renal adenomas when fed at 2,000 mg/kg.\(^3\) Quercetin has been reported to inhibit phosphodiesterases of both cGMP and cAMP.\(^4,5\)

### References