Lecanoric Acid  
*Item No. 22710*

**CAS Registry No.:** 480-56-8  
**Formal Name:** 2,4-dihydroxy-6-methyl-benzoic acid, 4-carboxy-3-hydroxy-5-methylphenyl ester  
**Synonym:** NSC 249981  
**MF:** C_{16}H_{14}O_{7}  
**FW:** 318.3  
**Purity:** ≥ 95%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥ 2 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Lecanoric acid is supplied as a solid. A stock solution may be made by dissolving the lecanoric acid in the solvent of choice. Lecanoric acid is soluble in organic solvents such as ethanol, methanol, DMSO, and dimethyl formamide, which should be purged with an inert gas.

### Description

Lecanoric acid is a naturally occurring depside polyphenol isolated from a variety of lichens.\(^1\) It is a potent antioxidant, surpassing ascorbic acid in a 2,2-diphenyl-1-picryl-hydrazyl-hydrate (DPPH) free radical scavenging assay (IC\(_{50}\) = 424.51 and 6.42 μg/ml for lecanoric and ascorbic acid, respectively).\(^2\) Lecanoric acid has antibacterial and antifungal activities with minimum inhibitory concentrations ranging from 0.5 to 1 mg/ml for a panel of fifteen microorganisms. In a cell viability assay, lecanoric acid exhibits antiproliferative activity against HeLa cells (IC\(_{50}\) = 123.97 μg/ml). Lecanoric acid also exhibits antidiabetic and hypolipidemic properties.\(^1,3\)

### References