There are two molecules in the asymmetric unit of the title compound, C_{21}H_{28}O_{3}, in which the dihedral angles between the aromatic rings are 6.4 (1) and 7.0 (1).\(^\text{1}\) The enone moiety of both molecules adopts an \(\text{s-cis}\) configuration. In the crystal, intermolecular \(\text{O} - \text{H} \cdots \text{O}\) and \(\text{C} - \text{H} \cdots \text{O}\) interactions to the same acceptor \(\text{O}\) atom generate \(R_{2}(6)\) ring motifs and further \(R_{2}(8)\) ring motifs. Topologically, the \(R_{2}(6)\) and \(R_{2}(8)\) ring motifs are arranged alternately, forming [001] chains of molecules. The crystal structure is further stabilized by \(\text{C} - \text{H} \cdots \pi\) interactions.

Related literature

For general background to the biological properties of chalcone derivatives, see: Bhat et al. (2005); Xue et al. (2004); Satyanarayana et al. (2004); Zhao et al. (2005); Yayli et al. (2006). For related structures, see: Razak, Fun, Ngaini, Rahman et al. (2009); Razak, Fun, Ngaini, Fadzillah et al. (2009a,b); Ngaini, Fadzillah et al. (2009); Ngaini, Rahman et al. (2009); Razak et al. (2009a,b). For hydrogen-bond motifs, see: Bernstein et al. (1995). For the stability of the temperature controller used in the data collection, see: Cosier & Glazer (1986). For bond-length data, see: Allen et al. (1987).