**Cerulenin**

**Synonyms**: Helicocerin, NSC 116069, 2,3-Epoxy-4-oxo-7,10-dodecadienamide

**Specifications**

- **CAS #**: 17397-89-6
- **Molecular Formula**: C_{12}H_{17}NO_{3}
- **Molecular Weight**: 223.3
- **Source**: Cephalosporium caerulens
- **Appearance**: Off-white powder
- **Purity**: >98% by HPLC
- **Long Term Storage**: -20°C
- **Solubility**: Soluble in ethanol, methanol, DMF or DMSO. Limited water solubility.

**Application Notes**

Cerulenin is an epoxy fatty acid amide isolated from the fungus Cephalosporium caerulens identified as an antifungal in the 1960s. Over the past 40 years, cerulenin has found broad application in lipid biochemistry as an inhibitor fatty acid and sterol biosynthesis. Cerulenin binds to \( \beta \)-keto-acyl-ACP synthase blocking the interaction of malonyl CoA. Cerulenin also inhibits bacterial fatty acid synthesis, acting on the FabH, FabB and FabF condensation enzymes. Cerulenin stimulates fatty acid oxidation and inhibits HMG-CoA synthetase activity.

**References**