Rotenone

Product Number  R 8875
Store at Room Temperature

Product Description
Molecular Formula: C_{23}H_{22}O_{6}
Molecular Weight: 394.4
CAS Number: 83-79-4
Melting Point: 165-166 °C
Extinction Coefficient: E^{\text{nm}} = 19.2 \text{ (294 nm, ethanol)}^2
Specific Rotation: -120° (1.38 g/100 ml chloroform at 25 °C)

Rotenone is a naturally occurring botanical compound obtained from the roots of Derris sp. It is an inhibitor of mitochondrial electron transport, specifically inhibiting NAD-linked substrate oxidation by mitochondria at the oxygen side of NADH dehydrogenase. 50% inhibition of the activity is observed at 10 picomoles/mg protein. Rotenone is also utilized as an insecticide. ³

Precautions and Disclaimer
For Laboratory Use Only. Not for drug, household or other uses.

Preparation Instructions
This product is soluble in chloroform (50 mg/ml), yielding a clear yellow solution. It is also soluble in DMSO (0.5 mg/ml).

Storage/Stability
Solutions in organic solvents decompose and oxidize upon exposure to light and air with color formation occurring.³

References
1. The Merck Index, 10th ed., Entry# 8138.

TMG/RXR 1/03