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## Product Information

### 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<sup>1</sup>

Extinction Coefficient:  $E^{mM} = 19.2$  (294 nm, ethanol)<sup>2</sup>

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.<sup>3</sup>

#### 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.<sup>3</sup>

#### References

1. The Merck Index, 10th ed., Entry# 8138.
2. J. Assoc. Off. Agr. Chemists, **36**, p. 371 (1953).
3. Data for Biochemical Research, 3rd ed., Dawson, R. M. C., et al., Oxford University Press (New York, NY: 1986), pp. 310-311.

TMG/RXR 1/03

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