

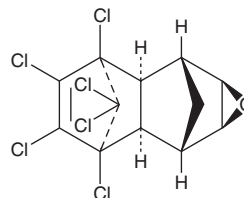
# PRODUCT INFORMATION



## Dieldrin

Item No. 24043

**CAS Registry No.:** 60-57-1  
**Formal Name:** (1aR,2R,2aS,3S,6R,6aR,7S,7aS)-  
rel-3,4,5,6,9,9-hexachloro-  
1a,2,2a,3,6,6a,7,7a-octahydro-2,7:3,6-  
dimethanonaphth[2,3-b]oxirene  
**MF:** C<sub>12</sub>H<sub>8</sub>Cl<sub>6</sub>O  
**FW:** 380.9  
**Purity:** ≥95%  
**Supplied as:** A solid  
**Storage:** -20 °C  
**Stability:** ≥4 years



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

### Laboratory Procedures

Dieldrin is supplied as a solid. A stock solution may be made by dissolving the dieldrin in the solvent of choice, which should be purged with an inert gas. Dieldrin is slightly soluble in chloroform.

### Description

Dieldrin is an organochlorine insecticide and an antagonist of GABA<sub>A</sub> receptors (IC<sub>50</sub> = 3.27 μM in rat brain vesicles).<sup>1</sup> It increases cell proliferation and the estrogen receptor transactivation gene response in MCF-7 cells when used at a concentration of 5 μM and inhibits the response to the synthetic androgen R1881 in CHO cells when used at concentration of 20 μM.<sup>2</sup> Dieldrin is toxic to rats with an LD<sub>50</sub> value of 46 mg/kg and induces hyperexcitability, seizures, and death.<sup>1,3</sup>

### References

1. Gant, D.B., Eldefrawi, M.E., and Eldefrawi, A.T. Cyclodiene insecticides inhibit GABA<sub>A</sub> receptor-regulated chloride transport. *Toxicol. Appl. Pharmacol.* **88(3)**, 313-321 (1987).
2. St. Omer, V. Investigations into mechanisms responsible for seizures induced by chlorinated hydrocarbon insecticides: the role of brain ammonia and glutamine in convulsions in the rat and cockerel. *J. Neurochem.* **18(3)**, 365-374 (1971).
3. Andersen, H.R., Vinggaard, A.M., Rasmussen, T.H., *et al.* Effects of currently used pesticides in assays for estrogenicity, androgenicity, and aromatase activity *in vitro*. *Toxicol. Appl. Pharmacol.* **179(1)**, 1-12 (2002).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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