# PRODUCT INFORMATION



o,p'-DDT

Item No. 24242

CAS Registry No.: 789-02-6

Formal Name: 1-chloro-2-[2,2,2-trichloro-1-(4-

chlorophenyl)ethyl]-benzene

Synonyms: 2,4'-DDT, (±)-o,p'-DDT,

o,p'-Dichlorodiphenyltrichloroethane,

NSC 33446, NSC 57644

MF:  $C_{14}H_{0}CI_{5}$ FW: 354.5 ≥95% **Purity:**  $\lambda_{max}$ : 235 nm UV/Vis.: A solid Supplied as: Storage: -20°C Stability: ≥4 years

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

# **Laboratory Procedures**

o,p'-DDT is supplied as a solid. A stock solution may be made by dissolving the o,p'-DDT in the solvent of choice. o,p'-DDT is slightly soluble in the organic solvent chloroform.

### Description

o,p'-DDT is an organochlorine pesticide that induces mortality of malaria mosquito (A. quadrimaculatus) fourth-instar larvae and A. aegypti larvae when used at concentrations ranging from 0.005 to 0.03 and 0.025 to 5 ppm, respectively.<sup>1,2</sup> It induces 100% mortality of goldfish (C. auratus) at a concentration of 4 ppm.<sup>2</sup> o,p'-DDT is estrogenic, increasing oviduct weight and glycogen content of chicken and Japanese quail.3 It enhances mammary gland differentiation and increases epithelial cell proliferation in mammary terminal end buds in pubertal female rats.  $^4$  o, p'-DDT is a persistent organic pollutant (POP) and is elevated in the sera of pregnant women in malaria-endemic regions of South Africa.<sup>5</sup>

## References

- 1. Jones, H.A., Incho, H.H., and Deonier, C.C. Comparative toxicity of p,p'- and o,p'-DDT to larvae of Anopheles quadrimaculatus. J. Econ. Entomol. 39(5), 672 (1946).
- Ginsburg, J.M. Comparative toxicity of DDT isomers and related compounds to mosquito larvae and fish. Science 105(2722), 233-234 (1947).
- Bitman, J., Cecil, H.C., Harris, S.J., et al. Estrogenic activity of o,p'-DDT in the mammalian uterus and avian oviduct. Science 162(3851), 371-372 (1968).
- Brown, N.M. and Lamartiniere, C.A. Xenoestrogens alter mammary gland differentiation and cell proliferation in the rat. Environ. Health Perspect. 103(7-8), 708-713 (1995).
- Röllin, H.B., Sandanger, T.M., Hansen, L., et al. Concentration of selected persistent organic pollutants in blood from delivering women in South Africa. Sci. Total. Environ. 408(1), 146-152 (2009).

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

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.

### WARRANTY AND LIMITATION OF REMEDY

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