# PRODUCT INFORMATION



## **Triadimenol**

Item No. 24216

CAS Registry No.: 55219-65-3

Formal Name:  $\beta$ -(4-chlorophenoxy)- $\alpha$ -(1,1-dimethylethyl)-1H-1,2,4-

triazole-1-ethanol

MF: C<sub>14</sub>H<sub>18</sub>CIN<sub>3</sub>O<sub>2</sub>

FW: 295.8

**Purity:** ≥95% (mixture of isomers)

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**

Triadimenol is supplied as a solid. A stock solution may be made by dissolving the triadimenol in the solvent of choice, which should be purged with an inert gas. Triadimenol is slightly soluble in methanol and DMSO.

#### Description

Triadimenol is a metabolite of triadimefon (Item No. 18714), a broad-spectrum chiral triazole fungicide, that is formed by reduction of a carbonyl group to the corresponding alcohol. It is teratogenic, inducing cranial nerve and ganglia abnormalities in a rat post-implantation whole embryo culture model when used at concentrations ranging from 12.5 to 125 µM.<sup>2</sup> In vivo, triadimenol induces embryotoxicity in rats and rabbits when administered orally at doses of 100 and 40 mg/kg, respectively. Embryonic exposure to triadimenol (3-3,000 μg/L) induces embryonic mortality as well as decreases fertility and increases the number of female offspring in medaka fish (O. latipes).3

#### References

- 1. Shen, Q., Li, J., Xu, P., et al. Enantioselective metabolism of triadimefon and its chiral metabolite triadimenol in lizards. Ecotoxicol. Environ. Saf. 143, 159-165 (2017).
- 2. Menegola, E., Broccia, M.L., Di Renzo, F., et al. In vitro teratogenic potential of two antifungal triazoles: Triadimefon and triadimenol. In Vitro Cell. Dev. Biol. Anim. 36(2), 88-95 (2000).
- 3. Chu, S.-H., Liao, P.-H., and Chen, P.-J. Developmental exposures to an azole fungicide triadimenol at environmentally relevant concentrations cause reproductive dysfunction in females of medaka fish. Chemosphere 152, 181-189 (2016).

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.

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