

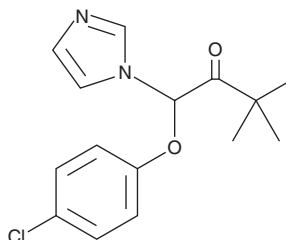
# PRODUCT INFORMATION



## (±)-Climbazole

Item No. 27968

**CAS Registry No.:** 38083-17-9  
**Formal Name:** 1-(4-chlorophenoxy)-1-(1H-imidazol-1-yl)-3,3-dimethyl-2-butanone  
**Synonym:** BAY-e 6975  
**MF:** C<sub>15</sub>H<sub>17</sub>ClN<sub>2</sub>O<sub>2</sub>  
**FW:** 292.8  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 223, 275 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥2 years



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

### Laboratory Procedures

(±)-Climbazole is supplied as a crystalline solid. A stock solution may be made by dissolving the (±)-climbazole in the solvent of choice, which should be purged with an inert gas. (±)-Climbazole is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of (±)-climbazole in these solvents is approximately 30 mg/ml.

### Description

(±)-Climbazole is an imidazole antifungal agent.<sup>1</sup> It inhibits the growth of *C. albicans* (MIC = 0.29 µg/ml), as well as clinical isolates of *M. pachydermatis* (MICs = <0.06-1 µg/ml) and *M. furfur* (MICs = <0.06-0.5 µg/ml) *in vitro*.<sup>2-4</sup> It also reduces the size of *Malassezia* populations on the skin of naturally infected dogs when used at a dose of 2% in shampoo.<sup>1</sup> (±)-Climbazole (80 mg/kg) increases the levels of cytochrome P450 in rat liver.<sup>5</sup> Formulations containing climbazole have been used in the treatment of dandruff.

### References

1. Cavana, P., Petit, J.Y., Perrot, S., *et al.* Efficacy of a 2% climbazole shampoo for reducing *Malassezia* population sizes on the skin of naturally infected dogs. *J. Mycol. Med.* **25(4)**, 268-273 (2015).
2. Stylianou, M., Kuleskiy, E., Lopes, J.P., *et al.* Antifungal application of nonantifungal drugs. *Antimicrob. Agents Chemother.* **58(2)**, 1055-1062 (2014).
3. Schmidt, A. *In vitro* activity of climbazole, clotrimazole and silver-sulphadiazine against isolates of *Malassezia pachydermatis*. *Zentralbl. Veterinarmed. B* **44(4)**, 193-197 (1997).
4. Schmidt, A. and Rühl-Hörster, B. *In vitro* susceptibility of *Malassezia furfur* against azole compounds. *Mycoses* **39(7-8)**, 309-312 (1996).
5. Kobayashi, Y., Suzuki, M., Ohshiro, N., *et al.* Climbazole is a new potent inducer of rat hepatic cytochrome P450. *J. Toxicol. Sci.* **26(3)**, 141-150 (2001).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897  
[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM