# **PRODUCT** INFORMATION



## Uniconazole

Item No. 17852

CAS Registry No.:	83657-22-1	
Formal Name:	βE-[(4-chlorophenyl)methylene]-α-(1,1-	
	dimethylethyl)-1H-1,2,4-triazole-1-ethanol	
Synonyms:	S 3307D, XE 1019D	ОН СІ
MF:	C <sub>15</sub> H <sub>18</sub> CIN <sub>3</sub> O	
FW:	291.8	
Purity:	≥95%	N N
UV/Vis.:	λ <sub>max</sub> : 255 nm	
Supplied as:	A crystalline solid	N
Storage:	-20°C	
Stability:	≥4 years	
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Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

#### Laboratory Procedures

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

Uniconazole is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, uniconazole should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Uniconazole has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

#### Description

Abscisic acid (ABA; Item No. 10073) is a plant hormone with diverse roles in disease resistance, plant development, and response to stresses (water, salt, temperature, and pathogens). Uniconazole is a plant growth regulator that functions by inhibiting cytochrome P450 707As (K<sub>i</sub> = 68 nM), a family of enzymes that catabolize ABA, and thus, suppress gibberellin and sterol biosynthesis.<sup>1</sup>

#### Reference

1. Saito, S., Okamoto, M., Shinoda, S., et al. A plant growth retardant, uniconazole, is a potent inhibitor of ABA catabolism in Arabidopsis. Biosci. Biotechnol. Biochem. 70(7), 1731-1739 (2006).

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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