

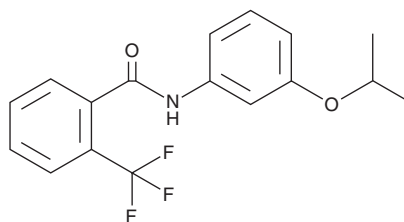
PRODUCT INFORMATION



Flutolanil

Item No. 33146

CAS Registry No.: 66332-96-5
Formal Name: N-[3-(1-methylethoxy)phenyl]-2-(trifluoromethyl)-benzamide
MF: $C_{17}H_{16}F_3NO_2$
FW: 323.3
Purity: $\geq 98\%$
Supplied as: A crystalline solid
Storage: $-20^{\circ}C$
Stability: ≥ 4 years



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

Laboratory Procedures

Flutolanil is supplied as a crystalline solid. A stock solution may be made by dissolving the flutolanil in the solvent of choice, which should be purged with an inert gas. Flutolanil is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of flutolanil in these solvents is approximately 10 mg/ml in ethanol and 30 mg/ml in DMSO and DMF.

Flutolanil is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, flutolanil should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Flutolanil has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Flutolanil is a benzanilide fungicide.¹ It is active against a panel of 241 field isolates of the plant pathogenic fungus *R. solani* when grown in flutolanil-enriched growth media ($IC_{50}s = 0.05-0.5$ mg/L). Flutolanil (0.34-1.95 $\mu g/g$) inhibits *R. solani* hyphal growth and infection cushion formation on rice plant leaf sheaths.² It is toxic to zebrafish embryos, larvae, and adults ($LC_{50}s = 3.91, 5.47,$ and 2.70 mg/L of tank water, respectively).³ Formulations containing flutolanil have been used to control fungal infections on rice crops.

References

1. Campion, C., Chatot, C., Perraton, B., *et al.* Anastomosis groups, pathogenicity and sensitivity to fungicides of *Rhizoctonia solani* isolates collected on potato crops in France. *Eur. J. Plant. Pathol.* **109**, 983-992 (2003).
2. Hirooka, T., Miyagi, Y., Araki, F., *et al.* Biological mode of action of flutolanil in its systemic control of rice sheath blight. *Phytopathology* **79**(10), 1091-1094 (1989).
3. Yang, Y., Qi, S., Chen, J., *et al.* Toxic effects of bromothalonil and flutolanil on multiple developmental stages in zebrafish. *Bull. Environ. Contam. Toxicol.* **97**(1), 91-97 (2016).

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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