

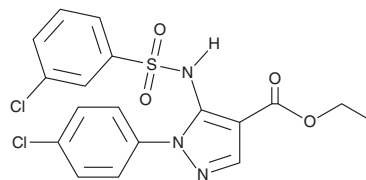
PRODUCT INFORMATION



Compound C22

Item No. 42343

CAS Registry No.: 3055029-65-4
Formal Name: 1-(4-chlorophenyl)-5-[[[3-chlorophenyl)sulfonyl]amino]-1H-pyrazole-4-carboxylic acid, ethyl ester
MF: $C_{18}H_{15}Cl_2N_3O_4S$
FW: 440.3
Purity: $\geq 98\%$
Supplied as: A 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

Compound C22 is supplied as a solid. A stock solution may be made by dissolving the compound C22 in the solvent of choice, which should be purged with an inert gas. Compound C22 is sparingly soluble (1-10 mg/ml) in chloroform and slightly soluble (0.1-1 mg/ml) in acetonitrile.

Description

Compound C22 is a fungicide.¹ It is active against the plant pathogenic fungi *V. mali*, *S. sclerotiorum*, *R. solani*, *B. cinerea*, and *T. viride* (EC_{50} s = 0.45, 0.49, 3.06, 0.57, and 1.43 mg/L, respectively). Compound C22 induces leakage of nucleic acid, soluble protein, and soluble sugar and the production of hydrogen peroxide and superoxide and increases the levels of malondialdehyde (MDA) in *V. mali* mycelium. *In vivo*, compound C22 (50 mg/L) decreases lesion size in *V. mali*-infected apple fruits and branches. It is not toxic to *A. mellifera* worker bees (LC_{50} = $>1,000$ mg/L).

Reference

1. Cheng, X., Song, Y., Gong, J., *et al.* Design, synthesis, and antifungal evaluation of novel pyrazole-5-sulfonamide derivatives for plant protection. *J. Agric. Food Chem.* **72(40)**, 22045-22053 (2024).

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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/16/2024

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