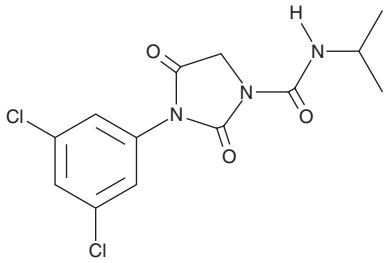
PRODUCT INFORMATION

Iprodione

Item No. 38877

CAS Registry No.:	36734-19-7
Formal Name:	3-(3,5-dichlorophenyl)-N-(1-methylethyl)-2,4-dioxo-1-imidazolidinecarboxamide
MF:	$C_{13}H_{13}Cl_2N_3O_3$
FW:	330.2
Purity:	≥95%
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

Iprodione is supplied as a solid. A stock solution may be made by dissolving the iprodione in the solvent of choice, which should be purged with an inert gas. Iprodione is sparingly soluble (1-10 mg/ml) in ethanol and DMSO.

Description

Iprodione is a dicarboximide fungicide.[1] It is active against the phytopathogenic fungi *A. alternata* and *B. cinerea* (EC_{50}s = 0.85 and 37.36 µg/ml, respectively).[2] Iprodione is also active against isolates of the phytopathogenic fungus *B. maydis* (EC_{50}s = 0.088-1.712 µg/ml).[3] It reduces the extent of *B. maydis* infection on the leaves of living potted maize plants when used at concentrations of 50-200 µg/ml. Iprodione (200 mg/kg) reduces body weight, testicular weight, sperm motility, and serum testosterone levels, as well as induces testicular damage, epididymal morphology disorganization, and sperm abnormalities in immature male rats.[1] Formulations containing iprodione have been used as fungicides in food and non-food crops in agriculture.

References

1. Hassan, M.A., El Bohy, K.M., El Sharkawy, N.I., *et al.* Iprodione and chlorpyrifos induce testicular damage, oxidative stress, apoptosis and suppression of steroidogenic- and spermatogenic-related genes in immature male albino rats. *Andrologia* **53(4),** e13978 (2021).
2. Esposito, T., Celano, R., Pane, C., *et al.* Chestnut (*Castanea sativa* Miller.) burs extracts and functional compounds: UHPLC-UV-HRMS profiling, antioxidant activity, and inhibitory effects on phytopathogenic fungi. *Molecules* **24(2),** 302 (2019).
3. Sun, J., Pang, C., Cheng, X., *et al.* Investigation of the antifungal activity of the dicarboximide fungicide iprodione against *Bipolaris maydis*. *Pestic. Biochem. Physiol.* **190,** 105319 (2023).

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