

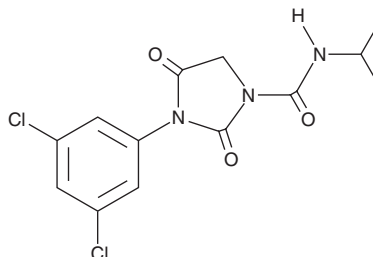
# PRODUCT INFORMATION



## 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:  $\geq 95\%$   
Supplied as: A solid  
Storage:  $-20^{\circ}\text{C}$   
Stability:  $\geq 4$  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.<sup>1</sup> It is active against the phytopathogenic fungi *A. alternata* and *B. cinerea* ( $EC_{50}s = 0.85$  and  $37.36 \mu\text{g/ml}$ , respectively).<sup>2</sup> Iprodione is also active against isolates of the phytopathogenic fungus *B. maydis* ( $EC_{50}s = 0.088$ - $1.712 \mu\text{g/ml}$ ).<sup>3</sup> It reduces the extent of *B. maydis* infection on the leaves of living potted maize plants when used at concentrations of 50-200  $\mu\text{g/ml}$ . 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.<sup>1</sup> 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).

#### 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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