

# PRODUCT INFORMATION



## Pyraclostrobin

Item No. 37533

CAS Registry No.: 175013-18-0

Formal Name: N-[2-[[[1-(4-chlorophenyl)-1H-pyrazol-3-yl]oxy]methyl]phenyl]-N-methoxy-carbamic acid, methyl ester

Synonym: Pyraclostrobine

MF: C<sub>19</sub>H<sub>18</sub>ClN<sub>3</sub>O<sub>4</sub>

FW: 387.8

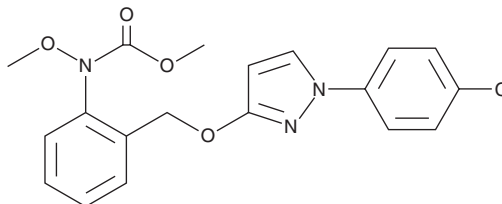
Purity: ≥95%

UV/Vis.: λ<sub>max</sub>: 277 nm

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

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

### Description

Pyraclostrobin is a carbamate fungicide.<sup>1</sup> It is active against the plant pathogenic fungi *B. cinerea*, *P. capsici*, *F. sulphureum*, *G. pestis*, and *S. sclerotiorum* (IC<sub>50</sub>s = 0.18, 0.005, 0.36, 0.03, and 0.15 µg/ml, respectively). Pyraclostrobin is toxic to zebrafish (LC<sub>50</sub> = 42.17 µg/L).<sup>2</sup> It induces nuclear and mitochondrial deformities in the heart and brain, as well as decreases heart rate, blood volume ejected, and cardiac output, in zebrafish larvae when used at a concentration of 37.5 µg/L. Pyraclostrobin (400 mg/kg) decreases locomotor activity and body weight, as well as induces hypothermia and diarrhea, in mice.<sup>3</sup> Formulations containing pyraclostrobin have been used as fungicides in agriculture.

### References

1. Wang, L., Zhao, S., Kong, X., *et al.* Design, synthesis and fungicidal evaluation of novel pyraclostrobin analogues. *Bioorg. Med. Chem.* **26**(4), 875-883 (2018).
2. Li, H., Zhao, F., Cao, F., *et al.* Mitochondrial dysfunction-based cardiotoxicity and neurotoxicity induced by pyraclostrobin in zebrafish larvae. *Environ. Pollut.* **251**, 203-211 (2019).
3. Tuttle, A.H., Salazar, G., Cooper, E.M., *et al.* Choice of vehicle affects pyraclostrobin toxicity in mice. *Chemosphere* **218**, 501-506 (2019).

#### 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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