

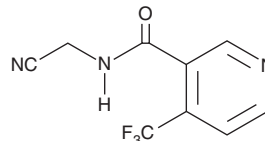
# PRODUCT INFORMATION



## Flonicamid

Item No. 25608

**CAS Registry No.:** 158062-67-0  
**Formal Name:** N-(cyanomethyl)-4-(trifluoromethyl)-3-pyridinecarboxamide  
**MF:** C<sub>9</sub>H<sub>6</sub>F<sub>3</sub>N<sub>3</sub>O  
**FW:** 229.2  
**Purity:** ≥98%  
**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

Flonicamid is supplied as a solid. A stock solution may be made by dissolving the flonicamid in the solvent of choice, which should be purged with an inert gas. Flonicamid is slightly soluble in DMSO and methanol.

### Description

Flonicamid is a pyridinecarboxamide insecticide.<sup>1</sup> It inhibits the brown planthopper (*N. lugens*) inward-rectifying potassium channel K<sub>ir</sub>1 (IC<sub>50</sub> = 0.64 μM). Flonicamid (100 μg/ml) inhibits aphid (*M. persicae*) salivation and sap ingestion during feeding on Japanese radish leaves.<sup>2</sup> It induces toxicity in the aphid species *A. gossypii*, *R. padi*, *S. graminum*, and *L. erysimi* (LC<sub>50</sub>s = 0.64, 0.74, 0.78, and 2.01 μg/ml, respectively) and rats (LD<sub>50</sub> = ≥844 mg/kg).<sup>2,3</sup> Formulations containing flonicamid have been used for the control of pest insects in agriculture.

### References

1. Ren, M., Niu, J., Hu, B., *et al.* Block of Kir channels by flonicamid disrupts salivary and renal excretion of insect pests. *Insect Biochem. Mol. Biol.* **99**, 17-26 (2018).
2. Morita, M., Ueda, T., Yoneda, T., *et al.* Flonicamid, a novel insecticide with a rapid inhibitory effect on aphid feeding. *Pest. Manag. Sci.* **63(10)**, 969-973 (2007).
3. Morita, M., Yoneda, T., and Akiyoshi, N. Research and development of a novel insecticide, flonicamid. *J. Pestic. Sci.* **39(3)**, 179-180 (2014).

#### 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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