

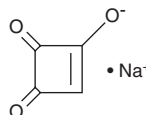
PRODUCT INFORMATION



Moniliformin (sodium salt)

Item No. 17497

CAS Registry No.: 71376-34-6
Formal Name: 3-hydroxy-3-cyclobutene-1,2-dione, monosodium salt
MF: C₄HO₃ • Na
FW: 120.0
Purity: ≥95%
Supplied as: A crystalline solid
Storage: 4°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Moniliformin (sodium salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the moniliformin (sodium salt) in water. The solubility of moniliformin (sodium salt) in water is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Moniliformin is a mycotoxin produced by fungi of the *Fusarium* genus that are common pathogens to corn and other agriculture grain crops.¹ Its phytotoxicity results from inducing mitotic arrest at the metaphase stage.² Moniliformin has been shown to be cardiotoxic to poultry and rats and cytotoxic to human red blood cell progenitors with an IC₅₀ value of 4.1 μM.^{3,4}

References

1. Rabie, C.J., Marasas, W.F.O., Thiel, P.G., *et al.* Moniliformin production and toxicity of different *Fusarium* species from Southern Africa. *Appl. Environ. Microbiol.* **43(3)**, 517-521 (1982).
2. Duke, S.O. and Dayan, F.E. Modes of action of microbially-produced phytotoxins. *Toxins (Basel)* **3(8)**, 1038-1064 (2011).
3. Sharma, D., Asrani, R.K., Ledoux, D.R., *et al.* Individual and combined effects of fumonisin B1 and moniliformin on clinicopathological and cell-mediated immune response in Japanese quail. *Poult. Sci.* **87(6)**, 1039-1051 (2008).
4. Fichoux, A.S., Sibiril, Y., Le Garrec, R., *et al.* *In vitro* myelotoxicity assessment of the emerging mycotoxins Beauvericin, Enniatin b and Moniliformin on human hematopoietic progenitors. *Toxicol* **59(1)**, 182-191 (2012).

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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