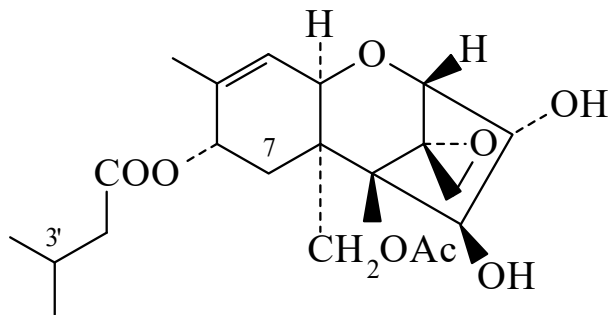




>>Entry Name: Toxin HT2

Synonym(s): 12,13-Epoxy-9-trichothecene-3,4,8,15-tetrol 15-acetate 8-(3-methylbutanoate), 9Cl. HT2 Toxin. Mycotoxin HT2. 4-Deacetyl T2 Toxin



CAS Registry Number: 26934-87-2

Molecular Formula: C<sub>22</sub>H<sub>32</sub>O<sub>8</sub>

Molecular Weight: 424.49

Accurate Mass: 424.20972

Percentage Composition: C 62.25%; H 7.60%; O 30.15%

Biological Source: Prod. by *Fusarium* sp.

Use/Importance: Shows some antitumour props. Shows similar toxicity to T-2 Toxin

Physical Description: Yellow oil

Solubility: BERDY SOL: Sol. MeOH, Et<sub>2</sub>O; poorly sol. H<sub>2</sub>O

UV: [neutral] λ<sub>max</sub> (EtOH) (Berdy)

Hazard & Toxicity: LD<sub>50</sub> (mus, ipr) 9.0 mg/kg ; BERDY HAZD : LD<sub>50</sub> (mus, ipr) 9 mg/kg

Sigma: T4138

>>Derivative: 4-Ac

>>Derivative: 4-Propanoyl

CAS Registry Number: 104903-80-2

Molecular Formula: C<sub>25</sub>H<sub>36</sub>O<sub>9</sub>

Molecular Weight: 480.554

Accurate Mass: 480.235935

Percentage Composition: C 62.49%; H 7.55%; O 29.96%

Biological Source: From *Fusarium sporotrichioides*

Use/Importance: Cytotoxic

Physical Description: Needles

Melting Point: Mp 141-142°

>>Derivative: 3'-Hydroxy

Synonym(s): 3'-Hydroxy HT2 toxin. TC3 toxin. Toxin TC 3

CAS Registry Number: 78368-54-4

Molecular Formula: C<sub>22</sub>H<sub>32</sub>O<sub>9</sub>

Molecular Weight: 440.489

Accurate Mass: 440.204635

Percentage Composition: C 59.99%; H 7.32%; O 32.69%

Biological Source: Prod. by *Fusarium heterosporum* and as T-2 Toxin metab.

Use/Importance: Mycotoxin

Solubility: BERDY SOL: Sol. MeOH, CHCl<sub>3</sub>; poorly sol. H<sub>2</sub>O

Hazard & Toxicity: LD<sub>50</sub> 8.5 mg/kg (p.o. mice)

References:

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Pawlosky, R.J., *J. Agric. Food Chem.*, 1984, **32**, 1420; 1423, (*isol, deriv, ms*)

Corley, D.G. *et al.*, *Tet. Lett.*, 1986, **27**, 4133, (*deriv*)

Cole, R.J. *et al.*, *Handbook of Toxic Fungal Metabolites*, Academic Press, New York, 1981, 181

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, TH1250