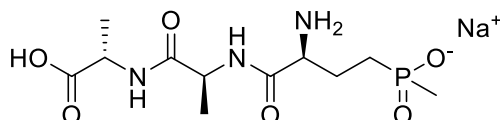


Bialaphos sodium

Code No.: **BIA-B2567**

Pack sizes: **5 mg, 25 mg**



Synonyms : MW 801, SF 1293

Specifications

CAS #	: 71048-99-2
Molecular Formula	: C₁₁H₂₂N₃O₆PNa
Molecular Weight	: 345.26
Source	: <i>Streptomyces viridochromogenes</i>
Appearance	: White solid
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in methanol or DMSO

Application Notes

Bialaphos is an herbicidal protoxin produced by *Streptomyces viridochromogenes* and *S. hygroscopicus*. Bialaphos is metabolised to form glufosinate which inhibits glutamine synthetase, resulting in the accumulation of ammonium and disruption of the plant's primary metabolism. Bialaphos resistance is conferred by acetylation of phosphinothricin.

References

1. Stoffwechselprodukte von mikroorganismen. 98. Mitteilung. Phosphinothricin und phosphinothricyl-alanyl-alanin. Bayer E. et al. *Helv Chim Acta* 1972, 55, 224.
2. Inhibition of glutamine synthetase and quantitative changes of free amino acids in shoots of bialaphos-treated Japanese barnyard millet. *J Pestic Sci.* 1986, 11, 27.
3. Characterization of the herbicide-resistance gene bar from *Streptomyces hygroscopicus*. Thomson C.J. et al. *EMBO J* 1987, 6, 2519.