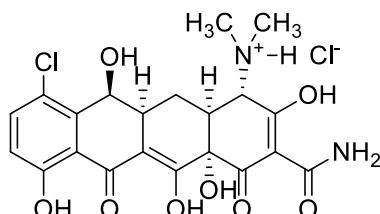


## Demeclocycline hydrochloride

Code No.: **BIA-D1463**

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



Synonyms : 6-Demethylchlortetracycline hydrochloride, 7-Chloro-6-demethyltetracycline hydrochloride, Declomycin, Ledermycin hydrochloride, RP 10192

### Specifications

CAS #	: <b>64-73-3</b>
Molecular Formula	: <b>C<sub>21</sub>H<sub>22</sub>Cl<sub>2</sub>N<sub>2</sub>O<sub>8</sub></b>
Molecular Weight	: <b>501.3</b>
Source	: <b><i>Streptomyces</i> sp.</b>
Appearance	: <b>Yellow to orange solid</b>
Purity	: <b>&gt;95% by HPLC</b>
Long Term Storage	: <b>-20°C</b>
Solubility	: <b>Soluble in ethanol, methanol, DMF or DMSO. Good water solubility.</b>

### Application Notes

Demeclocycline hydrochloride is a salt prepared from demeclocycline taking advantage of the basic dimethylamino group which protonates and readily forms a salt in hydrochloric acid solutions. The hydrochloride is the preferred formulation for pharmaceutical applications. Like all tetracyclines, demeclocycline shows broad spectrum antibacterial and antiprotozoan activity and acts by binding to the 30S and 50S ribosomal subunits, blocking protein synthesis.

### References

1. A new family of antibiotics: the demethyltetracyclines. McCormack J.R.D. et al., J. Am. Chem. Soc. 1957, 79, 4561.
2. Structure-activity relationships in the tetracycline series. Blackwood R.K. & English A.R. In Structure-activity relationships among the semisynthetic antibiotics. (Ed. Perlman D. Academic Press, London) 1977, 397.