

<b>Product Name:</b>	Demeclocycline hydrochloride
<b>Product Number:</b>	D032
<b>CAS Number:</b>	64-73-3
<b>Molecular Formula:</b>	$C_{21}H_{22}Cl_2N_2O_8$
<b>Molecular Weight:</b>	501.3
<b>Appearance:</b>	Yellow to orange solid
<b>Storage Conditions:</b>	-20°C
<b>Description:</b>	<p>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.</p> <p>Demeclocycline hydrochloride is soluble in ethanol, methanol, DMF, DMSO, and water.</p>
<b>Mechanism of Action:</b>	Demeclocycline HCl blocks protein synthesis by binding to the 30S and 50S ribosomal subunits.
<b>References:</b>	<p>A new family of antibiotics: the demethyltetracyclines. McCormack J.R.D. et al. J. Am. Chem. Soc. 1957, 79, 4561.</p> <p>Structure-activity relationships in the tetracycline series. Blackwood R.K. &amp; English A.R. In Structure-activity relationships among the semisynthetic antibiotics. (Ed. Perlman D. Academic Press, London) 1977, 397.</p>