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Schircks Laboratories

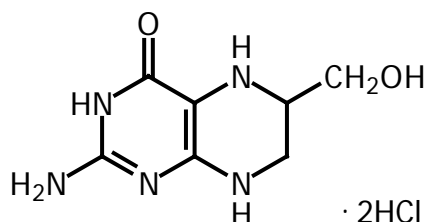
DATA SHEET

(6R,S)-6-Hydroxymethyl-5,6,7,8-tetrahydropterin dihydrochloride

Product No. 11.423

Abbreviation used: 6HMPH₄

CAS No. 96563-48-3



C₇H₁₁N₅O₂ · 2HCl

MW 270.1

Description	Off white powder															
Biochemistry	6-Hydroxymethyltetrahydropterin is converted to its corresponding 7-substituted isomers and serves as a cofactor in the phenylalanine hydroxylase reaction. The 6-substituted pterin to 7-substituted pterin conversion occurs in the absence of pterin-4a-carbinolamine dehydratase and is shown to be a nonenzymatic process.															
Solubility	6HMPH ₄ is freely soluble in water, (50 g/100 g of water (22°C)). A 1 mM solution of 6HMPH ₄ gives a pH of 3.0.															
Analytical methods	<table border="0"> <tr> <td>HPLC</td> <td>column</td> <td>Whatman Partisil 10 SCX</td> </tr> <tr> <td>Conditions</td> <td>eluant</td> <td>50 mM NaH₂PO₄ pH 3</td> </tr> <tr> <td></td> <td>flow rate</td> <td>1.5 ml/min</td> </tr> <tr> <td></td> <td>wavelength</td> <td>254 nm</td> </tr> <tr> <td></td> <td>solution</td> <td>1 mg/ml H₂O</td> </tr> </table>	HPLC	column	Whatman Partisil 10 SCX	Conditions	eluant	50 mM NaH ₂ PO ₄ pH 3		flow rate	1.5 ml/min		wavelength	254 nm		solution	1 mg/ml H ₂ O
HPLC	column	Whatman Partisil 10 SCX														
Conditions	eluant	50 mM NaH ₂ PO ₄ pH 3														
	flow rate	1.5 ml/min														
	wavelength	254 nm														
	solution	1 mg/ml H ₂ O														
Purity: HPLC	>98.0%															
Stability	6HMPH ₄ is not hygroscopic. A 1 mM solution of 6HMPH ₄ is relatively unstable at RT. Analysis by HPLC shows 3.5% degradation after 2 hours at RT. The powder stored at room temperature for 3 months is very stable and no change in its purity is seen.															
Storage	Keep the powder dry in vials at -20°C or colder. 6HMPH ₄ can be transported without the use of dry ice.															
Use	6HMPH ₄ is an important standard for analytical work. It is sold for laboratory use only.															
Safety	6HMPH ₄ is known to be safe for the intended use. Avoid prolonged inhalation of the fine dust of 6HMPH ₄ , which is acidic. Otherwise, there are no special precautions required in handling this product.															

Further data sheets can be found on our website www.schircks.ch