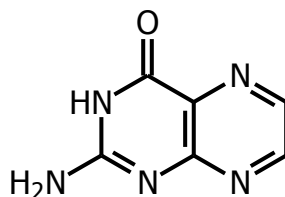


DATA SHEET

PTERIN

Product no. 11.903

CAS No. [2236-60-4]



$C_6H_5N_5O$

MW 163.1

Description	Beige powder														
Solubility	Pterin is practically insoluble in water. The solubility of pterin is 0.002 g per 100 g of water (22°C). Concentrated solutions of pterin can be prepared using 0.05 M NaOH. Ultrasonication may be used to improve dissolution.														
Analytical methods	<p>HPLC conditions:</p> <table border="0"> <tr> <td>column:</td> <td>Waters Spherisorb S5-ODS1</td> </tr> <tr> <td>eluant:</td> <td>10 mM Na₂HPO₄ pH 6 - Methanol, (19:1)</td> </tr> <tr> <td>flow rate:</td> <td>1 ml/min</td> </tr> <tr> <td>wavelength:</td> <td>215 nm</td> </tr> <tr> <td>solution:</td> <td>1 mg/ml 0.05 M NaOH</td> </tr> </table> <p>TLC conditions:</p> <table border="0"> <tr> <td>stationary phase:</td> <td>cellulose</td> </tr> <tr> <td>eluant:</td> <td>5% NH₄HCO₃</td> </tr> </table>	column:	Waters Spherisorb S5-ODS1	eluant:	10 mM Na ₂ HPO ₄ pH 6 - Methanol, (19:1)	flow rate:	1 ml/min	wavelength:	215 nm	solution:	1 mg/ml 0.05 M NaOH	stationary phase:	cellulose	eluant:	5% NH ₄ HCO ₃
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Stability	Pterin is a very stable substance. It can be stored for several years dry in tightly closed amber coloured vials at -20°C or colder.														
Storage	Keep the powder dry in amber vials at -20°C or colder. In tightly closed amber vials wrapped in aluminium foil, it is stable at ambient temperature for several months. Pterin can be transported without the use of dry ice.														
Uses	Pterin is an important standard for analytical work and is used as starting material for the synthesis of tetrahydropterin (product no. 11.909) and dihydropterin*. It is sold for laboratory use only.														
Safety information	Pterin is known to be safe and there are no special precautions required in handling this product.														
References	<p>C.A. Nichol, et al., Biosynthesis and metabolism of tetrahydrobiopterin and molybdopterin, Ann. Res. Biochem., <u>54</u>, (1985), 729.</p> <p>Niederwieser, et al., Biochemical and clinical aspects of pteridines, Vol.1, Berlin- New York, (1982), 81-102.</p> <p>Beilstein 26, IV, 3936.</p> <p>*S.J.R. Heales and K. Hyland, Production of stable solutions of 7,8-dihydropterin, Pteridines, <u>1</u>, (1989), 151.</p>														



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