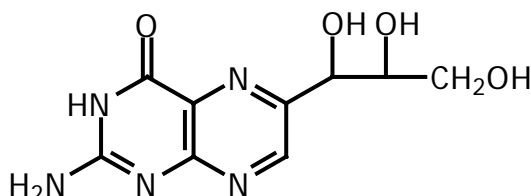


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# Schircks Laboratories

## DATA SHEET

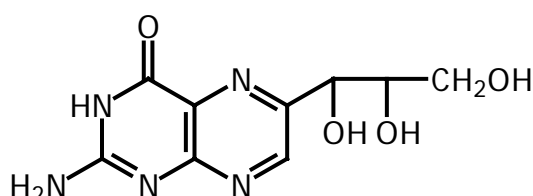
### Neopterin Product No.'s 11.303, 11.325



Product no. 11.303 D-Neopterin  
 CAS No. [2009-64-5]

$C_9H_{11}N_5O_4$

MW 253.2



Product no. 11.325 L-Neopterin  
 CAS No. [2277-43-2]

$C_9H_{11}N_5O_4$

MW 253.2

Description	Yellow powder		
Biochemical functions	<p>Neopterin has two isomers. We sell both D- and L-neopterin. D-Neopterin is the natural form. The determination of neopterin concentrations is a sensitive method of monitoring the activity of the cellular immune system because of the close association of the stimulation of T-lymphocytes, the release of interferon and the synthesis of neopterin.</p> <p>The levels of neopterin are higher in patients with certain infections, with some tumours, with autoimmune diseases and in those rejecting transplants.</p> <p>Dihydroneopterin triphosphate is part of the synthesis pathway of tetrahydrobiopterin, an important cofactor in humans.</p>		
Solubility	<p>Neopterin is practically insoluble in water. Its solubility is about 0.005 g per 100 g of water (22°C). Concentrated solutions may be prepared using 0.05 M NaOH. Ultrasonication may be used to improve dissolution.</p>		
Analytical methods	HPLC conditions:	column: eluant: flow rate: wavelength:	Waters Spherisorb S5-ODS1 10 mM $Na_2HPO_4$ pH 6 1 ml/min 254 nm
	TLC conditions	stationary phase: eluant:	cellulose water
Specifications	Purity: HPLC TLC	> 99.0% one blue fluorescent spot at 366 nm	
Stability	Neopterin is light sensitive. Neopterin contains half a mole of water.		
Storage	Keep the powder dry in amber vials at -20°C or colder. Neopterin can be transported without the use of dry ice. In tightly closed amber vials wrapped in aluminium foil, it is stable at ambient temperature for several months.		
Uses	Neopterin is an important standard for analytical work. It can be used in the screening of blood donors for various diseases. It is sold for laboratory use only.		
Safety information	Neopterin is known to be safe and there are no special precautions required in handling this product.		
References	<p>Roger Klein: „Identification, Stereoconfiguration, Chromatographic and Fluorescence Properties of Natural Pterins“. In: „Chemistry and Biology of Pteridines and Folates. Advances in Experimental Medicine and Biology“. 338, Plenum Press, New York (1993), S. 43ff.</p> <p>Neopterin als immundiagnostische Messgrösse. D. Fuchs et al., Dtsch. Med. Wschr., 120, (1995), 567-570 and the references cited therein.</p> <p>Neopterin. Biochemistry, Methods, Clinical applications. Wachter et al., de Gruyter, Berlin 1992.</p>		

Further data sheets can be found on our website [www.schircks.ch](http://www.schircks.ch)

The information in this publication is based on our current knowledge and experience. It does not relieve users or processors from carrying out their own precautions and tests.