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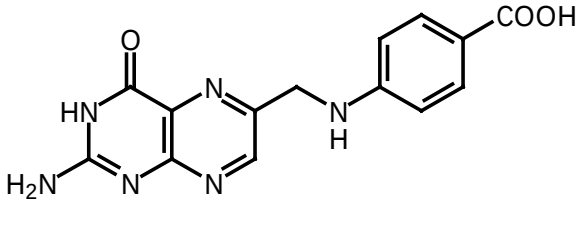
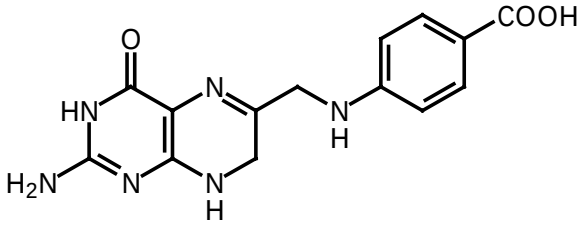
Schircks Laboratories

D A T A S H E E T

Pteroic Acid and 7,8-Dihydropteroic acid
Product No.'s 16.113, 16.114



Pteroic acid
Product no. 16.113 $C_{14}H_{12}N_6O_3$ MW: 312.3



7,8-Dihydropteroic acid
Product no. 16.114 $C_{14}H_{14}N_6O_3$ MW: 314.3

Synonyms**: 4-{[(2-amino-4-oxo-3,4,7,8-tetrahydropteridin-6-yl)methyl]amino}benzoic acid**

Product no.		16.113	16.114
Description		light yellow powder	light brown powder
Solubility in H_2O		Without the addition of alkali, both substances are almost insoluble in water. Ultrasonication may be used to improve dissolution.	
HPLC Conditions	**column**	Waters Spherisorb S5 ODS2	PhaseSep Partisil SAX
	eluant	7.5 mM phosphate buffer pH 7.0 / methanol (9:1)	25 mM phosphate buffer pH 7.5
	flow rate	1.0 ml/min	2.0 ml/min
	wavelength	254 nm	254 nm
	solution	1 mg/ 3 ml 0.05% NaOH	1 mg/ 3 ml 0.05% NaOH
Purity: HPLC		The pteroic acid that we manufacture is about 97% pure. It contains folic acid and 1.5% of unknown impurities.	The 7,8-dihydropteroic acid that we manufacture is about 93% pure. It contains tetrahydropteroic acid, pteroic acid and 1.5% of unknown impurities.
Stability		Pteroic acid is stable in the presence of oxygen.	Solutions of dihydropteroic acid are very quickly oxidised.
Storage		Both substances should be stored in a freezer at -20°C or colder.	
Safety Information		Pteroic acid and 7,8-dihydropteroic acid is known to be safe and there are no special precautions required in handling this product. It is sold for laboratory use only.	
Literature		A Convenient Synthesis of Pteroic Acid. Laurence T. Plante, J. Org. Chem. 36 No. 6, (1971), 860. Preparation and Purification of Pteroic Acid from Pteroylglutamic Acid (Folic Acid). John M. Scott, Methods in Enzymology, 66, (1980), 657. Chemical Conversion of Folic Acid to Pteroic Acid. Carroll Temple et al. J. Org. Chem. 46, (1981), 3666 Determination of pteroic acid by high-performance thin-layer chromatography. Contribution to the investigation of 7,8-dihydropteroate synthase, Rainer Bartels and Lothar Bock, Journal of Chromatography, A,659,1994, 185	

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