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## **DATA SHEET**

## 4-Amino-10-methylpteroylpolyglutamates Product No.'s 16.412 and 16.417

Synonyms: Methotrexate polyglutamates Abbreviations used: APA-Glu<sub>2</sub> and APA-Glu<sub>7</sub>

We have not prepared data sheets for each of the APA-Glu<sub>n</sub> but we have data sheets for two members of the group.

$$\begin{array}{c} NH_2 \\ NH_2 \\ NH_3 \end{array} \begin{array}{c} O \\ -NH \\ -H_2 \\ CH_2 \\ CO \end{array} \begin{array}{c} CO_2^{\odot} NH_4^{\odot} \\ -H_2 \\ CO \end{array} \begin{array}{c} O \\ -NH^{\odot} \\ -H_2 \\ -O \\ -NH^{\odot} \end{array}$$

 $\begin{array}{c|c} & & & \\ & & & \\ NH_2 \\ N \\ N \\ N \\ N \\ \end{array}$ 

 $\begin{array}{c} APA\text{-}Glu_2 \ ammonium \ salt \\ C_{25}H_{26}N_9O_8(NH_4)_3 \end{array}$ 

Prod. No. 16.412 MW 634.7  $\begin{array}{c} \text{APA-Glu}_7 \text{ ammonium salt} \\ \text{C}_{50} \text{H}_{56} \text{N}_{14} \text{O}_{23} \left( \text{NH}_4 \right)_8 \end{array}$ 

Prod. No.16.417 MW 1365.4

Product number		16.412	16.417
Description		yellow-orange powder	yellow-orange powder
Solubility in H₂O		very soluble	very soluble
pH of a 1 mM solution in water		5.7	5.9
HPLC Conditions	column	Waters Spherisorb S5 ODS1 4.6x150 mm	Waters Spherisorb S5 ODS1 4.6x150 mm
	eluant	10 mM Na <sub>2</sub> HPO <sub>4</sub> pH 7.0 / Methanol (19:1)	10 mM Na₂HPO₄ pH 6.0
	flow rate	1.0 ml/min	1.0 ml/min
	wavelength	254 nm	254 nm
	solution	0.6 mg/ml H₂O	1.4 mg/ml H <sub>2</sub> O
Purity: HPLC		97.0% - 99.5%	97.0% - 99.5%
Stability powder		APA-Glu <sub>n</sub> substances are light sensitive and very hygroscopic.	
•	solutions	No degradation was observed in a 1 mM solution in water left open for 3 days.	1 mM solution in water left open degrades at rate 0.11% / 3 days.
Storage		Keep the powder dry in vials at $-20^{\circ}\text{C}$ or colder. These compounds can be transported without the use of dry ice. In tightly closed vials they are stable at ambient temperature for several weeks.	
Safety Information		Methotrexate is toxic <sup>1)</sup> and probably also its derivatives. Our products are sold for laboratory use only.	
Literature		1)Please refer to entries for folic acid and methotrexate in the Merck Index. 2)Godwin H.A., et al, The Synthesis of Biologically Active Pteroyloligo-γ-L-glutamates (Folic Acid Conjugates). J. Biol. Chem., <u>247</u> , (1972), 2266-2271 (UV-absorption).	

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