



PHMG comparative analyses by GPC and ^{13}C NMR

(Nov05 – Nov06)

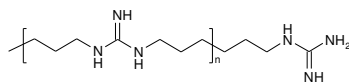
**Pharmapokrov
Dezavid**

Pharmapokrov

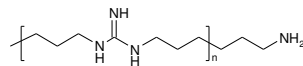
Solid blocks, (Aug05)

ASG Ref.	Sender's Ref.	Mp	Mw	Mn
10372775	NBZ2169/68	921 (919, 924)	2890 (2917, 2863)	1217 (1213, 1221)

	End Groups	
	Amine	-G
Ratio	0.73	1.27
Percentage	36.3	63.7



G end groups



Amino end groups

Addition of AgNO_3 suggested chloride salt (white ppt)

Surface tension of 250ppm aqueous solution determined as 72.0 dyne/cm (Ref.. Z2169/74)

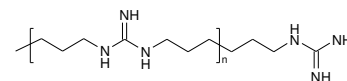
Pharmapokrov

Solid blocks, (Aug06)

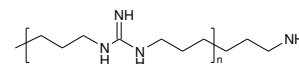
Prepared as 20% aqueous solutions prior to analysis

ASG Ref.	Batch number	Mp	Mw	Mn
10386714	23	942 (940, 944)	1914 (1890, 1938)	1157 (1154, 1160)
10386716	434	1073 (1073, 1073)	4261 (4269, 4253)	1511 (1507, 1514)
10386717	1	943 (942, 944)	1921 (1936, 1906)	1157 (1158, 1156)
10386718	252	1066 (1051, 1081)	4240 (4228, 4252)	1511 (1508, 1514)
10386719	296	963 (964, 961)	2166 (2168, 2164)	1217 (1218, 1215)
10386720	257	1061 (1063, 1059)	4218 (4175, 4261)	1509 (1502, 1516)
10386721	297	965 (966, 963)	2147 (2146, 2147)	1213 (1213, 1213)
10386722	24	976 (974, 977)	2169 (2162, 2176)	1216 (1215, 1217)
10386723	340	1046 (1047, 1044)	3494 (3444, 3544)	1427 (1424, 1429)
10386726	331	938 (943, 933)	1910 (1920, 1900)	1157 (1160, 1153)

Batch number	End Groups (%)	
	Amine	-G
23	31.8	68.2
434	36.3	63.7
1	31.4	68.6
252	35.1	64.9
296	32.0	68.0
257	34.5	65.5
297	33.1	66.9
24	32.7	67.3
340	28.5	71.5
331	33.1	66.9



G end groups



Amino end groups

NB ref. A1604231

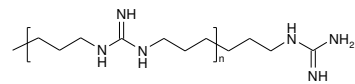
Dezavid

~5 % active PHMG solution, ex Russia via 'Les Mureaux' (Jun06)

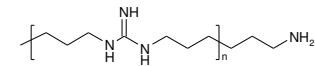
[Blend of PHMG with ADBAC]

ASG Ref.	Sender's Ref.	Mp	Mw	Mn
10386726	A1604231	946 (955, 937)	1920 (1834, 2005)	1114 (1107, 1121)

	End Groups	
	Amine	-G
Ratio	0.68	1.32
Percentage	34.2	65.8



G end groups



Amino end groups

Analytical comparative overview

All samples (excluding 10 x Pharmapokrov)

Source	Mw	End group [-NH2/ -G ratio]
Deloncide	1469	0.40
Pharmapokrov (x1)	2890	0.57
SkanB 1125	990	0.85
IPEL #1	1176	1.17
IPEL #2	802	1.20
Dezavid	1920	0.52

10 x Pharmapokrov (incl. Aug05 batch)

Batch	Mw	End group [-NH2/ -G ratio]	Appearance of 20% aq. soln
23	1914	0.47	Sl.turbid colourless
434	4261	0.57	Clear colourless, few insolubles
1	1921	0.46	Sl.turbid v.pale yellow
252	4240	0.54	Clear colourless, few insolubles
296	2166	0.47	Clear colourless
257	4218	0.53	V.sl.turbid colourless, few insolubles
297	2147	0.49	Clear v.pale yellow
24	2169	0.49	Sl.turbid colourless, few insolubles
340	3494	0.40	Sl.turbid colourless, few insolubles
331	1910	0.49	Sl.turbid colourless, few insolubles
Aug05	2890	0.57	-

Pharmapokrov PHMG : Variation in Mw

