Comparison of METHOCEL™ Grades for Pharmaceutical Applications

METHOCEL™ Premium products:	K3 LV	K100 LV	K4M	K15M	K100M	E3 LV	E5 LV	E6 LV	E15 LV	E50 LV	E4M	E10M	VLV	A15 LV	A4C	A15C	A4M
Viscosity (mPa.s 2% in water at 20C)	2.4-3.6	80-120	2,663-4,970	13,275-24,780	75,000-140,000	2.4-3.6	4.0-6.0	4.8-7.2	12-18	40-60	2,663-4,970	9,525-17,780	2.3-3.3	12-18	320-480	1,298-2,422	2,663-4,970
Methoxyl substitution	19.0-24.0%	19.0-24.0%	19.0-24.0%	19.0-24.0%	19.0-24.0%	28.0-30.0	28.0-30.0	28.0-30.0	28.0-30.0	28.0-30.0	28.0-30.0%	N/A	27.0-30.0%	27.5-31.5%	27.5-31.5%	27.5-31.5%	27.5-31.5%
If CR designation, methoxyl substitution	N/A	22.0-24.0%	22.0-24.0%	22.0-24.0%	22.0-24.0%	N/A	N/A	N/A	N/A	N/A	28.0-30.0%	28.0-30.0%	N/A	N/A	N/A	N/A	N/A
Hydroxypropoxyl substitution	7.0-12.0%	7.0-12.0%	7.0-12.0%	7.0-12.0%	7.0-12.0%	7.0-12.0	7.0-12.0	7.0-12.0	7.0-12.0	7.0-12.0	7.0-12.0%	N/A	4.2-7.5%	N/A	N/A	N/A	N/A
If CR designation, hydroxypropoxyl substitution	N/A	7.5-9.5%	7.5-9.5%	8.5-10.5%	9.5-11.5%	N/A	N/A	N/A	N/A	N/A	8.5-10.5%	8.5-10.5%	N/A	N/A	N/A	N/A	N/A
Loss on Drying (weight %)	5.0% Max	5.0% Max	5.0% Max	5.0% Max	5.0% Max	5.0% Max	5.0% Max	5.0% Max	5.0% Max	5.0% Max	5.0% Max	5.0% Max	5.0% Max	5.0% Max	5.0% Max	5.0% Max	5.0% Max
If CR designation, Particle size, % thru 40 mesh	N/A	≥ 99.0%	≥ 99.0%	≥ 99.0%	≥ 99.0%	N/A	N/A	N/A	N/A	N/A	≥ 99.0%	≥ 99.0%	N/A	N/A	N/A	N/A	N/A
If CR designation, Particle size, % thru 100 mesh	N/A	≥ 90.0%	≥ 90.0%	≥ 90.0%	≥ 90.0%	N/A	N/A	N/A	N/A	N/A	≥ 90.0%	≥ 90.0%	N/A	N/A	N/A	N/A	N/A
If CR designation, Particle size, % thru 230 mesh	N/A	50.0-80.0%	50.0-80.0%	50.0-80.0%	50.0-80.0%	N/A	N/A	N/A	N/A	N/A	50.0-80.0%	50.0-80.0%	N/A	N/A	N/A	N/A	N/A

(These are typical properties, not to be construed as specifications)