

Product Specifications

General name	Hypromellose			Method
	Type	60SH	65SH	
Substitution type	2910	2906	2208	
Identification A. — E.*	Conforms			USP
Viscosity (mPa·s)*	See table below			USP
pH*	5.0 — 8.0			USP
Appearance of solution**	Conforms			EP
Loss on drying*	Not more than 5.0%			USP
Residue on ignition*	Not more than 1.5%			USP
Heavy metals*	Not more than 20 ppm			USP
Methoxy content*	28.0 — 30.0%	27.0 — 30.0%	19.0 — 24.0%	USP
Hydroxypropoxy content*	7.0 — 12.0%	4.0 — 7.5%	4.0 — 12.0%	USP
Residual solvents***	Conforms			USP

* Harmonized items among the USP, EP and JP.

** Specific local attribute in EP.

*** Specific local attribute in USP.

Each type of METOLOSE® includes several viscosity grades as shown below.
 METOLOSE® SR is designed for hydrophilic matrix tablets.
 (See separate brochure for information on METOLOSE® SR)

● **Available grades and viscosity specifications** ○: METOLOSE®, SR: METOLOSE® SR

SH			Labeled Viscosity	USP Specification (mPa·s)* ¹
60SH	65SH	90SH		
○	○		50	40.0 — 60.0
		SR	100	80 — 120
	○		400	320 — 480
○	○	○, SR	4000	3000 — 5600
○			10000	7500 — 14000
		○, SR	15000	11250 — 21000
		○, SR	100000	75000 — 140000

*¹ Viscosity ranges are 80% - 120% for labeled viscosity less than 600 mPa·s and 75% - 140% for labeled viscosity 600 mPa·s and higher, respectively. (Viscosity is harmonized item among the USP, EP and JP).

General name	Methylcellulose	Method
Type	SM	
Identification (A-C)	Conforms	USP
Identification (A-E)	Conforms	EP
pH	5.0 — 8.0	EP
Viscosity	See table below	USP&EP
Loss on drying	Not more than 5.0%	USP
Residue on ignition	Not more than 1.5%	USP
Heavy metals	Within the limit (Not more than 0.001%)	USP
Appearance of solution	Conforms	EP
Residual solvents	Conforms	USP
Methoxy content	27.5 — 31.5%	USP

● Available grades and viscosity specifications ○: METOLOSE®

SM	Labeled Viscosity	USP Specification (cP) ^{*1}	EP Specification (mPa·s) ^{*2}
○	4	3.2 — 4.8	3.2 — 4.8
○	15	12.0 — 18.0	12.0 — 18.0
○	25	20.0 — 30.0	20.0 — 30.0
○	100	80 — 120	80 — 120
○	400	300 — 560	320 — 480
○	1500	1125 — 2100	1125 — 2100
○	4000	3000 — 5600	3000 — 5600

*1 USP Viscosity is 80% - 120% for labeled viscosity 100 cP and lower, and 75% - 140% for labeled viscosity over 100 cP, respectively.

*2 EP Viscosity is 80% - 120% for labeled viscosity less than 600 mPa·s, and 75% - 140% for labeled viscosity 600 mPa·s and higher, respectively.