

Tender specs for Advance GPC with viscometer and Light scattering detection

	Qty.	Tender specs
Solvent Delivery	1	The instrument must have an operation pressure range of 0 – 60 MPa (0 – 600 bar, 0 – 8700 psi) for two or more solvent, preferably Flow upto 10 ml/min Flow precision: $\leq 0.07\%$ RSD or ≤ 0.02 min SD or better Ensures longer lifetime of the seals when using higher buffer concentrations
Optional Degasser	1	pH compatibility 1-14, Made of PEEK & or PTFE, Volume / channel: 15 ml or less
Sample Injection	1	Injection range: 0.1 to 100 μ L & can be extended upto 1500 μ L Must have injector programming capability as a part of method.
Column Oven	1	Important to reduce heating/cooling related overhead time if temperature screening is required, increases flexibility. Required for post-column solvent cooling to reach lowest detector noise. Range: 10 degrees below ambient to 80 °C Temperature stability ± 0.15 °C or better, minimum three columns should accommodated.
Multi Detector Suite	1	System should be with multi detector suite
GPC/SEC MDS RI Detector	1	RI detection Type Deflection Cell volume 10 μ L or less Temp: 30–60 °C Wavelength 660 nm (880 nm option) Linearity 250 μ RIU or better Sensitivity 4 mV/ μ RIU or better Short Term Noise <20 nRIU (<80 μ V) Cell Volume 6 μ L, Temp Range 30–60 °C Temp Stability ± 0.2 °C
GPC/SEC MDS Viscometer	1	Temp Range 30-60 °C Flow cell: 90 μ L or less, Linearity 0.5 %FS

		Sensitivity $\eta_{sp} 1 \times 10^{-5}$ Pa.s or better Temp Range 30-60 °C, Pressure Rating 50 kPa (7 psi) or better
GPC/SEC GPC MDS Dual Angle LSD	1	Sample Cell Volume up to 15 μ L Rayleigh Scattering Angles 7 or 15 and 90 degrees Temp Range 30-60 °C Temp Stability ± 0.2 °C or better
GPC/SEC Software	1	Able to calculate Mw, Mn, Mp, PDI. Branching information and all related GPC calculations Must have data security feature for authorized usage of software and data

- All the GPC modules must have leak sensor for safety.
- **System should be operational as independent Analytical HPLC and GPC with multi detector**
- **HPLC system upgradability with Fluorescence, DAD or even with single Quad MS in future.**
- Should be supplied with required columns (Fixed pore size, and Mixed pore size for the range 500-500000 d, guard columns and compatible standards for organic or aqueous GPC