

**TOSOH**

EcoSEC Specification Sheet

THE WORLD'S FIRST SEMI-MICRO GPC/SEC SYSTEM FOR HIGH THROUGHPUT POLYMER ANALYSIS

Reliability

- 7th generation of Tosoh GPC system engineering
- TSK-GEL SuperMultiporeHZ columns with extended linear molecular weight ranges
- Precise results from one EcoSEC GPC system to another

Baseline stability

- Dynamic flow through both the RI sample and reference cells

Reproducibility

- Temperature controlled pumps

Performance efficiency

- Improved resolution from utilizing the more efficient TSK-GEL SuperMultiporeHZ columns
- Minimal peak broadening outside of the column even for 4.6 mm ID columns
- Two-fold reduction in analysis time
- Lower solvent & disposal costs

Easy Operation

- Dedicated software
- One touch warm-up & shut down
- Overlay individual runs
- Ready for analysis in 2 hours (THF)

Global Standards

- UL 61010-1
- CE mark certification
- FDA support 21 CFR part 11



► PUMP

Flow rate	10 to 2,000 $\mu\text{L}/\text{min}$ in 1 $\mu\text{L}/\text{min}$ steps
Accuracy	+/- 2%
Precision	+/- 0.2%
Max. pressure	25 MPa or 3,500 psi

► AUTO-INJECTOR

Injection volume	1 to 1,500 μL in 1 μL increments
Number of samples	100

► COLUMN OVEN

Temperature range	ambient plus 10°C to 60°C
Capacity	7.8 mm ID x 30 cm L x 8 columns
Accuracy	+/- 0.5°C
Precision	+/- 0.02°C

► RI DETECTOR

Type	Bryce or dual flow type. Tungsten light source (1.00 - 1.80 RI range)
Cell volume	2.5 μL
Noise	2×10^{-9} RI units (RIU)
Drift	1×10^{-7} RIU/h (THF, 1.0 mL/min)

► UV DETECTOR (OPTIONAL)

Wavelength	195 to 350 nm
Cell volume	2 μL
Time constant	0.5, 1.0 and 3.0 seconds
Noise	2.5×10^{-5} AU (254 nm)
Drift	3×10^{-4} AU/h (254 nm)

► DIMENSION

680 (W) x 500 (D) x 580 (H) mm

**For further details of choice and selection of the EcoSEC system,
please visit our website www.ecosec.eu
or contact one of the PSS technical specialists
at +49 (0)6131-962390**