



Zettachring 6, 70567 Stuttgart, Germany
 Tel: +49-711-13257-0 Fax: +49-711-13257-89
 E-Mail: info.tbg@tosoh.com
 Web: www.tosohbioscience.com

3604 Horizon Drive, Suite 100, King of Prussia, PA 19406, USA
 Tel: +1-484-805-1219 Fax: +1-610-272-3028
 E-Mail: info.tbl@tosoh.com
 Web: www.tosohbioscience.com

PRODUCT SPECIFICATION SHEET

Product Name: Toyopearl® Butyl-650 (hydrophobic interaction resin – strongly hydrophobic)



Part Numbers:	43153	Toyopearl Butyl-650S, 35 µm, 25 mL
	07476	Toyopearl Butyl-650S, 35 µm, 100 mL
	14701	Toyopearl Butyl-650S, 35 µm, 1 L
	07975	Toyopearl Butyl-650S, 35 µm, 5 L
	19802	Toyopearl Butyl-650M, 65 µm, 25 mL
	07477	Toyopearl Butyl-650M, 65 µm, 100 mL
	14702	Toyopearl Butyl-650M, 65 µm, 1 L
	07976	Toyopearl Butyl-650M, 65 µm, 5 L
	43127	Toyopearl Butyl-650C, 100 µm, 25 mL
	07478	Toyopearl Butyl-650C, 100 µm, 100 mL
	14703	Toyopearl Butyl-650C, 100 µm, 1 L
	07977	Toyopearl Butyl-650C, 100 µm, 5 L
	21376	ToyoScreen Butyl-650M, 1 mL x 6 ea.
	21377	ToyoScreen Butyl-650M, 5 mL x 6 ea.
	21398	ToyoScreen HIC Mix Pack, 1 mL x 6 grades x 1 ea. (Ether, Butyl-650, Hexyl, Phenyl, PPG, SuperButyl)
	21399	ToyoScreen HIC Mix Pack, 5 mL x 6 grades x 1 ea. (Ether, Butyl-650, Hexyl, Phenyl, PPG, SuperButyl)
	21400	ToyoScreen Column Holder
	42194	ToyoScreen Column Holder with fittings

Product Description: Toyopearl is a methacrylic polymer incorporating high mechanical and chemical stability. Resins are available as non-functionalised “HW” series resins for size exclusion separations, and derivatised with surface chemistries for alternative modes of chromatography such as ion exchange, hydrophobic interaction or affinity separations.

Toyopearl Butyl-650 chromatographic resin is designed for hydrophobic interaction chromatography. This chromatographic mode separates molecules on the basis of hydrophobic interactions between the sample and the resin. The separation is usually accomplished in buffered aqueous solution with a gradient of decreasing ionic strength.

Formulation: Particulate resin (spherical), available in particle sizes (mean diameter):
 35 µm = “S” grade
 65 µm = “M” grade
 100 µm = “C” grade
 Supplied as slurry in 20 % ethanol (v/v).

Physicochemical Specifications:	▪ Appearance	White resin slurry which settles upon standing
	▪ Particle Size Distribution (>80 % within range)	20 – 50 µm for Butyl-650S 40 – 90 µm for Butyl-650M 50 – 150 µm for Butyl-650 C
	▪ Exclusion Limit	5 x 10 ⁶ Dalton (globular protein)

▪ Mean Pore Diameter	1000 Å
▪ Pressure drop across the column	max. 7 bar (recommended)
▪ Operating Linear Flowrate	normally 10 – 600 cm/hour (depending on particle size)
▪ Protein Adsorption Capacity	40 ± 10 mg/ml (Lysozyme)
▪ Bacterial Count	≤ 100 CFU/ml
▪ Endotoxin Concentration	≤ 10.0 endotoxin units/ml
▪ Pack sizes and type	25 ml, 50 ml, 100 ml, 250 ml, 1 L, 5 L, 50 L Packed in virgin Polyethylene container with Polypropylene cap.
▪ Resin Volume per Container	The indicated volume is the settled resin volume.
▪ Shipping Solvent	72 % (v/v) slurry in 20 % (v/v) ethanol
▪ Long Term Storage Conditions	20 % (v/v) ethanol
▪ Cleaning in Place / Sanitization	0.5 M NaOH or 0.1 M HCl
▪ Foreign Substance	not observed, no visual evidence
▪ Eluable Matter	< 0.1 %
▪ Shelf Life Stability	Minimum 5 years

For detailed test procedures please refer to Regulatory Support File BB-MF-3907.