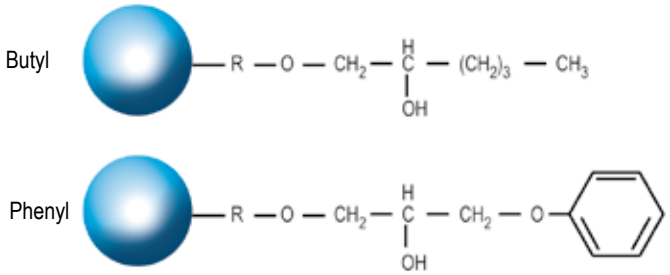
Cellufine® Butyl, Phenyl

- Spherical particles exhibiting high mechanical strength
- Butyl, Phenyl, functionality
- Pre-swollen
- Virtually no shrinkage or swelling
- Stable in organic solvents and surfactants
- Stable coupling chemistry
- Resistant to 0.2 M NaOH
- Autoclavable (121 °C, 20 min)

Product	P/N	Qty
Cellufine, Phenyl	**19900**	100 ml
	19901	500 ml
Cellufine, Butyl	**19905**	100 ml
	19906	500 ml

Benefits

- High flow rates allowing rapid chromatography and direct scale-up
- Enables optimum selectivity to be obtained
- Easy packing
- Easy large scale operation. No shrinkage at high salt concentrations
- Enables range of solvent systems to be utilized
- Resistant to cleaning and elution conditions
- Sterilizable



Cellufine® GCL-2000

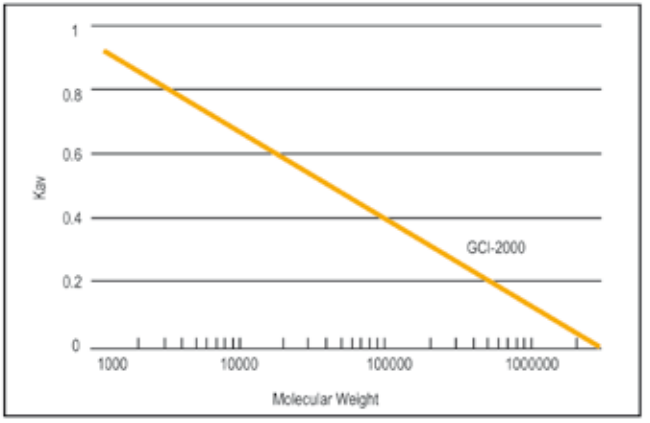
- Rigid spherical particles
- Outstanding mechanical strength
- Hydrophilic
- High pore volume
- Broad selection of fractionation range
- Supplied preswollen
- High chemical resistance
- Autoclavable at 121 °C for 30 minutes

Benefits

- High flow rate compatibility even in large diameter process columns
- May be pumped or stirred without integral support damage
- Low non-specific adsorption and high recovery
- Good capacity
- Optimize selectivity to required molecular weight range
- No time-consuming swelling procedures required
- Usable with all common salts, detergents, chaotropic agents, organic solvents
- Depyrogenation
- Sterilizable

Features

Matrix :	Cross linked cellulose
Particle Shape :	Spherical
Particle Size :	GCL-2000, 53 – 125 µm
Chemical Resistance :	Media can be used with most salts, detergents, solvents, acids and bases, including 8M urea, 6M guanidine / HCL, 0.1M HCL and 0.5M NaOH
Mechanical Resistance :	Media will withstand peristaltic pumping and extended magnetic stirring
Schrinkage / Swelling :	Shrinkage or swelling < 3 % with changes in pH or ionic strength. shrinkage or swelling with solvents varies with solvent and media
Autoclavable :	121 °C for 30 minutes
Supplied :	Suspension in 20 % ethanol



Kav vs. molecular weight curves for proteins

Molecular weight Exclusion limit

Product	Exclusion Limit (Daltons)		
	PEG	Proteins	Polysaccharides
Cellufine, GCL-2000	200,000	3,000,000	-

Cellufine® GH-25

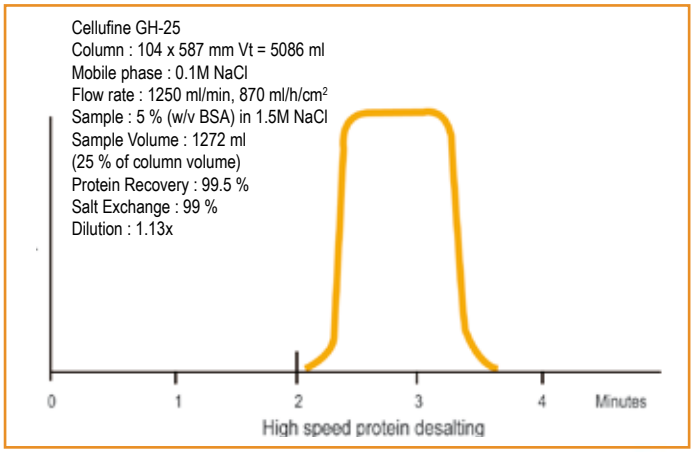
Cellufine® GH-25 column are suitable for rapid protein desalting, buffer exchange and removal of alcohol and detergents

Features

- Mechanically robust spherical particles
- Efficient salt removal
- Hydrophilic
- Pre-swollen
- pH : stable 1 - 14 (0.1M HCl, 0.5M NaOH)
- Resistant to organic solvents
- Autoclavable (121°C, 30 min)

Benefits

- Enables high flow rates and short run times
- Permits large sample loads (typical : 5 - 30 minute run times in columns from 1 ml to 100 liters, with loads up to 35 % bed volume)
- Low non-specific adsorption, high recovery
- Easy packing
- Easy cleaning and depyrogenation
- Permits use with all commonly used solvents and buffers without shrinkage or swelling
- Sterilizable



Features

Matrix :	Crosslinked cellulose
Particle Size :	44 - 105 µm
Gel Exclusion Limit :	3kD
Efficiency :	98 -to- 100 % recovery. No deterioration after 250 days, 1000 cycles.
Autoclavable :	121°C, 30 min.
Pressure resistance :	No collapse at up to 870 ml /h /cm² flow in large columns
pH Stability	pH 1-14
Chemical resistance :	Detergents and dissociating agents. No change after 30 days in 0.1 M HCl or 0.1 M NaOH
Supplied :	Suspension, 20 % ethanol

Product	P/N	Qty
Cellufine GH-25	**670000327**	100 ml
	19711	500 ml
Cellufine GCL-2000	**672000327**	100 ml
	19791	500 ml