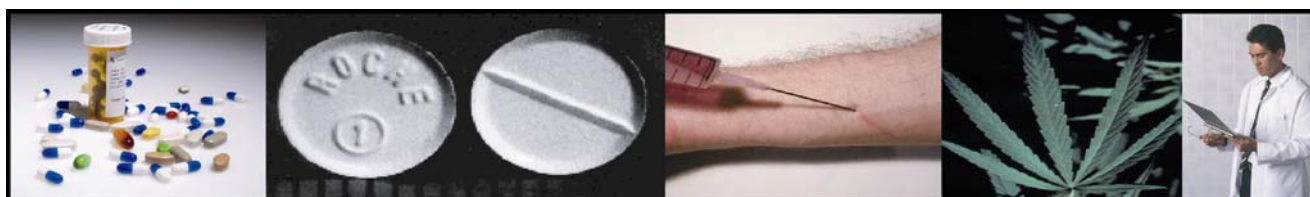


CLEAN-UP[®] Hydrophilic Normal Phase Columns



This sorbent is composed of a silica backbone bonded with carbon chains containing polar functional groups. Groups which will possess such polarity include amines, hydroxyls and carbonyls.

Hydrophilic Sorbents & Structures			Analytes: R-OH, R-SH, R-NH ₂ R ₂ -NH, R ₃ -N Washes: non-polar organic solvents i.e. hexane/ethyl acetate (80:20) methylene chloride Elutions: polar organic solvent usually with some aqueous
Sorbent	Structure		
Silica	-SiOH		
Diol	-Si-(CH ₂) ₃ OCH ₂ CHOHCH ₂ OH		
Cyanopropyl	-Si-(CH ₂) ₃ CN		
Mechanism of Hydrophilic Bonding Compounds are retained on hydrophilic sorbents through polar interactions including hydrogen bonding, pi-pi or dipole-dipole interaction. These types of interactions occur when a distribution of electrons between individual atoms in functional groups is unequal, causing negative and positive polarity. Compounds typically extracted on a hydrophilic column include analytes which have polar groups, including amines, hydroxyls and carbonyls. Elution is performed by strong polar solvents.		Example of a Hydrophilic Phase 	

CLEAN-UP[®] Hydrophilic Normal Phase Columns

Part Number	Sorbent Amount/ Tube Volume	Unit per Pack	Description
Unbonded Silica (Acid Washed)			
CUSIL1L1	50mg/1mL	100	40-63 μm Particle Size 60Å Pore Size 500m²/g Surface Area Application: Removes hydrophilic (polar) impurities, purification of hydrophilic (polar) compounds.
CUSIL111	100mg/1mL	100	
CUSIL123	200mg/3mL	50	
CUSIL153	500mg/3mL	50	
CUSIL156	500mg/6mL	50	
CUSIL1M6	1g/6mL	30	
CUSIL11Z	100mg/10mL	50	
CUSIL12Z	200mg/10mL	50	
CUSIL15Z	500mg/10mL	50	
CUSIL12M15	2g/15mL	20	
CUSIL15M25	5g/25mL	20	
CUSIL110M75	10g/75mL	10	
Pharma-Sil[™]			
PHSIL1L1	50mg/1mL	100	40-63 μm Particle Size 60Å Pore Size 525m²/g Surface Area Application: Removes hydrophilic (polar) impurities, purification of hydrophilic (polar) compounds.
PHSIL111	100mg/1mL	100	
PHSIL123	200mg/3mL	50	
PHSIL153	500mg/3mL	50	
PHSIL156	500mg/6mL	50	
PHSIL1M6	1g/6mL	30	
PHSIL11Z	100mg/10mL	50	
PHSIL12Z	200mg/10mL	50	
PHSIL15Z	500mg/10mL	50	
PHSIL12M15	2g/15mL	20	
PHSIL15M25	5g/25mL	20	
PHSIL110M75	10g/75mL	10	
High Surface Activity Silica			
HSSIL1L1	50mg/1mL	100	40-63 μm Particle Size 60 Å Pore Size 547m²/g Surface Area Application: Removes hydrophilic (polar) impurities, purification of hydrophilic (polar) compounds.
HSSIL111	100mg/1mL	100	
HSSIL123	200mg/3mL	50	
HSSIL153	500mg/3mL	50	
HSSIL156	500mg/6mL	50	
HSSIL1M6	1g/6mL	30	
HSSIL11Z	100mg/10mL	50	
HSSIL12Z	200mg/10mL	50	
HSSIL15Z	500mg/10mL	50	
HSSIL12M15	2g/15mL	20	
HSSIL15M25	5g/25mL	20	
HSSIL110M75	10g/75mL	10	

CLEAN-UP[®] Hydrophilic Normal Phase Columns

Part Number	Sorbent Amount/ Tube Volume	Unit per Pack	Description
Florisil[®]			
CUFLS1L1	50mg/1mL	100	<p>% Organic Loading: N/A</p> <p>Application: Removes polar-type compounds.</p> <p>Florisil[®] products are manufactured by U.S. Silica, Co.</p>
CUFLS111	100mg/1mL	100	
CUFLS123	200mg/3mL	50	
CUFLS153	500mg/3mL	50	
CUFLS156	500mg/6mL	50	
CUFLS1M6	1g/6mL	30	
CUFLS11Z	100mg/10mL	50	
CUFLS12Z	200mg/10mL	50	
CUFLS15Z	500mg/10mL	50	
CUFLS12M15	2g/15mL	20	
CUFLS15M25	5g/25mL	20	
CUFLS110M75	10g/75mL	10	
Alumina, Acidic			
CUALA1L1	50mg/1mL	100	<p>% Organic Loading: N/A</p> <p>Application: Removes polar-type compounds.</p>
CUALA111	100mg/1mL	100	
CUALA123	200mg/3mL	50	
CUALA153	500mg/3mL	50	
CUALA156	500mg/6mL	50	
CUALA1M6	1g/6mL	30	
CUALA11Z	100mg/10mL	50	
CUALA12Z	200mg/10mL	50	
CUALA15Z	500mg/10mL	50	
CUALA12M15	2g/15mL	20	
CUALA15M25	5g/25mL	20	
CUALA110M75	10g/75mL	10	
Alumina, Basic			
CUALB1L1	50mg/1mL	100	<p>% Organic Loading: N/A</p> <p>Application: Removes polar-type compounds.</p>
CUALB111	100mg/1mL	100	
CUALB123	200mg/3mL	50	
CUALB153	500mg/3mL	50	
CUALB156	500mg/6mL	50	
CUALB1M6	1g/6mL	30	
CUALB11Z	100mg/10mL	50	
CUALB12Z	200mg/10mL	50	
CUALB15Z	500mg/10mL	50	
CUALB12M15	2g/15mL	20	
CUALB15M25	5g/25mL	20	
CUALB110M75	10g/75mL	10	

CLEAN-UP[®] Hydrophilic Normal Phase Columns

Part Number	Sorbent Amount/ Tube Volume	Unit per Pack	Description
Alumina, Neutral			
CUALN1L1	50mg/1mL	100	% Organic Loading: N/A Application: Removes polar-type compounds.
CUALN111	100mg/1mL	100	
CUALN123	200mg/3mL	50	
CUALN153	500mg/3mL	50	
CUALN156	500mg/6mL	50	
CUALN1M6	1g/6mL	30	
CUALN11Z	100mg/10mL	50	
CUALN12Z	200mg/10mL	50	
CUALN15Z	500mg/10mL	50	
CUALN12M15	2g/15mL	20	
CUALN15M25	5g/25mL	20	
CUALN110M75	10g/75mL	10	

CLEAN-UP[®] Hydrophilic Normal Phase Columns

Part Number (Endcapped)	Part Number (Unendcapped)	Sorbent Amount/ Tube Volume	Unit per Pack	Description
CN, Cyanopropyl				
CECNP1L1	CUCNP1L1	50mg/1mL	100	% Organic Loading: 6.90 Application: Removes steroid-type compounds.
CECNP111	CUCNP111	100mg/1mL	100	
CECNP113	CUCNP113	100mg/3mL	50	
CECNP123	CUCNP123	200mg/3mL	50	
CECNP153	CUCNP153	500mg/3mL	50	
CECNP156	CUCNP156	500mg/6mL	50	
CECNP1M6	CUCNP1M6	1g/6mL	30	
CECNP11Z	CUCNP11Z	100mg/10mL	50	
CECNP12Z	CUCNP12Z	200mg/10mL	50	
CECNP15Z	CUCNP15Z	500mg/10mL	50	
CECNP12M15	CUCNP12M15	2g/15mL	20	
CECNP15M25	CUCNP15M25	5g/25mL	20	
CECNP110M75	CUCNP110M75	10g/75mL	10	

CLEAN-UP[®] Hydrophilic Normal Phase Columns

部件编号	Sorbent Amount/ Tube Volume	Unit per Pack	Description
Diol			
CUDOL1L1	50mg/1mL	100	<p>% Organic Loading: 8.00</p> <p>Application: Removes hydrophilic (polar) impurities, purification of hydrophilic (polar) compounds.</p>
CUDOL111	100mg/1mL	100	
CUDOL123	200mg/3mL	50	
CUDOL153	500mg/3mL	50	
CUDOL156	500mg/6mL	50	
CUDOL1M6	1g/6mL	30	
CUDOL11Z	100mg/10mL	50	
CUDOL12Z	200mg/10mL	50	
CUDOL15Z	500mg/10mL	50	
CUDOL12M15	2g/15mL	20	
CUDOL15M25	5g/25mL	20	
CUDOL110M75	10g/75mL	10	
Carbon-Graphitized Non-Porous, 120/400 Mesh			
CUCARB1L1	50mg/1mL	100	<p>Application: Carbon supports have been used to isolate extremely polar organic compounds. They work by a hydrophobic mechanism with a high surface area and ion exchange. This interaction can happen in a wide range of polar and non-polar solvents.</p>
CUCARB111	100mg/1mL	100	
CUCARB123	200mg/3mL	50	
CUCARB153	500mg/3mL	50	
CUCARB156	500mg/6mL	50	
CUCARB1M6	1g/6mL	30	
CUCARB11Z	100mg/10mL	50	
CUCARB12Z	200mg/10mL	50	
CUCARB15Z	500mg/10mL	50	
CUCARB1M15	1g/15mL	20	
CUCARB12M15	2g/15mL	20	