

We offer you a full choice...

Hydrophobic

SORBENT

C2 ethyl
C3 propyl
C4 n-butyl
iC4 isobutyl
tC4 tertiary butyl
C5 pentyl
C6 hexyl
C7 heptyl
C8 octyl
C10 decyl
C12 dodecyl
C18 octadecyl
C20 eicosyl
C30 tricontyl
Cyclohexyl
Phenyl

STRUCTURE

SiCH_2CH_3
 $\text{Si}(\text{CH}_2)_2\text{CH}_3$
 $\text{Si}(\text{CH}_2)_3\text{CH}_3$
 $\text{SiCH}_2\text{CH}(\text{CH}_3)_2$
 $\text{SiC}(\text{CH}_3)_3$
 $\text{Si}(\text{CH}_2)_4\text{CH}_3$
 $\text{Si}(\text{CH}_2)_5\text{CH}_3$
 $\text{Si}(\text{CH}_2)_6\text{CH}_3$
 $\text{Si}(\text{CH}_2)_7\text{CH}_3$
 $\text{Si}(\text{CH}_2)_9\text{CH}_3$
 $\text{Si}(\text{CH}_2)_{11}\text{CH}_3$
 $\text{Si}(\text{CH}_2)_{17}\text{CH}_3$
 $\text{Si}(\text{CH}_2)_{19}\text{CH}_3$
 $\text{Si}(\text{CH}_2)_{29}\text{CH}_3$
 $\text{Si}-\text{C}_6\text{H}_{11}$
 $\text{Si}-\text{C}_6\text{H}_5$

Hydrophilic

SORBENT

Silica
Diol
Cyanopropyl
Florisil PR[®]
Alumina-Acid
Alumina-Neutral
Alumina-Base

STRUCTURE

SiOH
 $\text{Si}(\text{CH}_2)_3\text{OCH}_2\text{CHOHCH}_2\text{OH}$
 $\text{Si}(\text{CH}_2)_3\text{CN}$

“Over 35 Different Phases”
Particle size 40-60 μm ,
Pore size 60Å

Ion Exchange

SORBENT

Anion

Aminopropyl (1° amine)
n-2 aminoethyl (2° amine)
Diethylamino (3° amine)
Quaternary Amine (4° amine)

STRUCTURE

$\text{Si}(\text{CH}_2)_3\text{NH}_3^+$
 $\text{Si}(\text{CH}_2)_3\text{NH}_2^+(\text{CH}_2)_2\text{NH}_3^+$
 $\text{Si}(\text{CH}_2)_3\text{NH}^+(\text{CH}_2\text{CH}_3)_2$
 $\text{Si}(\text{CH}_2)_3\text{N}^+(\text{CH}_3)_3$

pKa

9.8
10.1, 10.9
10.6
always charged

• Available in alternative weaker counter ion;

(CAQAX with CH_3CO_2^- counter ion or CHQAX with OH^- counter ion)

*** SAX (DVB / Styrene)

Cation

Carboxylic Acid
Propylsulfonic Acid
Benzenesulfonic Acid
Benzenesulfonic Acid High Load

SiCH_2COOH
 $\text{Si}(\text{CH}_2)_3\text{SO}_3\text{H}$
 $\text{Si}(\text{CH}_2)_2-\text{C}_6\text{H}_4-\text{SO}_3\text{H}$
 $\text{Si}(\text{CH}_2)_2-\text{C}_6\text{H}_3-\text{SO}_3\text{H}$

4.8
<1
always charged
always charged

*** SCX (DVB / Styrene)

Copolymeric (Mixed Phase)**

SORBENT

Aminopropyl + C8
Quaternary Amine + C8
Carboxylic Acid + C8
Propylsulfonic Acid + C8
Benzenesulfonic Acid + C8
Cyanopropyl + C8
Cyclohexyl + C8

STRUCTURE

$\text{Si}(\text{CH}_2)_3\text{NH}_3^+ \text{Si}(\text{CH}_2)_7\text{CH}_3$
 $\text{Si}(\text{CH}_2)_3\text{N}^+(\text{CH}_3)_3 + \text{Si}(\text{CH}_2)_7\text{CH}_3$
 $\text{SiCH}_2\text{COOH} + \text{Si}(\text{CH}_2)_7\text{CH}_3$
 $\text{Si}(\text{CH}_2)_3\text{SO}_3\text{H} + \text{Si}(\text{CH}_2)_7\text{CH}_3$
 $\text{Si}(\text{CH}_2)_2-\text{C}_6\text{H}_4-\text{SO}_3\text{H} + \text{Si}(\text{CH}_2)_7\text{CH}_3$
 $\text{Si}(\text{CH}_2)_3\text{CN} + \text{Si}(\text{CH}_2)_7\text{CH}_3$
 $\text{Si}-\text{C}_6\text{H}_{11} + \text{Si}(\text{CH}_2)_7\text{CH}_3$

** UCT manufactures true copolymeric sorbents by dually reacting their high purity silicas. The product is not a mixed bed sorbent.

***Hydrated DVB / Styrene cross linked sorbent

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