

## Capillary GC Columns and Guard Columns/Retention Gaps

### PLOT Columns

#### Supel-Q™ PLOT Capillary GC Column

**Application:** This column exhibits very little bleed, even at its maximum temperature, and effectively resolves carbon dioxide and C1-C4 hydrocarbons at above ambient temperatures. It is also suitable for analyses of sulfur gases, alcohols, ketones, aldehydes, and many polar compounds. Gasoline and other petroleum fractions can be analyzed as well.

**USP Code:** None

**Phase:**

- Divinylbenzene

**Temp. Limits:**

- Subambient to 250 °C (isothermal or programmed)

I.D. (mm)	L (m)	Cat. No.	Qty
0.32	30	24242	1 ea
0.53	30	25462	1 ea
0.53	30	23937-U	1 ea
0.53	50	23939-U	1 ea

**Note:** P/N 23937-U includes an attached guard column.

#### Alumina Sulfate PLOT Capillary GC Column

**Application:** This highly dependable column has the necessary selectivity for the separation of alkanes, alkenes, and alkynes in mixtures of C1-C4 hydrocarbons. It provides elution of acetylene after n-butane and the elution of methyl acetylene after n-pentane and 1,3-butadiene. The polymer surface is deactivated to reduce peak tailing.

**USP Code:** None

**Phase:**

- Sulfate-deactivated alumina

**Temp. Limits:**

- Subambient to 180 °C (isothermal or programmed)

I.D. (mm)	L (m)	Cat. No.	Qty
0.32	30	28321-U	1 ea
0.32	50	28322-U	1 ea
0.53	30	28323-U	1 ea
0.53	50	28324-U	1 ea

#### Alumina Chloride PLOT Capillary GC Column

**Application:** This column allows for the separation of C1-C4 hydrocarbons. Because this column is slightly less polar than the Alumina sulfate PLOT, it provides a different elution order pattern when alkane, alkene, and alkyne mixtures of light hydrocarbons are analyzed. It also provides excellent separation of many common fluorinated compounds, such as freons.

**USP Code:** None

**Phase:**

- Chloride-deactivated alumina

**Temp. Limits:**

- Subambient to 180 °C (isothermal or programmed)

I.D. (mm)	L (m)	Cat. No.	Qty
0.32	30	28326-U	1 ea
0.32	50	28327-U	1 ea
0.53	30	28328-U	1 ea
0.53	50	28329-U	1 ea

#### Mol Sieve 5A PLOT Capillary GC Column

**Application:** This column can be used for the separation of many permanent gas components, such as oxygen, nitrogen, carbon monoxide, and methane, in less than five minutes. More difficult separations, such as argon from oxygen, can be achieved by using subambient temperatures. These columns possess the strongest adsorption strength of any PLOT column.

**USP Code:** None

**Phase:**

- Aluminosilicate

**Temp. Limits:**

- Subambient to 300 °C (isothermal or programmed)

I.D. (mm)	L (m)	Cat. No.	Qty
0.32	30	24243	1 ea
0.53	30	25463	1 ea

## SCOT Columns

Supelco is the leader in Support Coated Open Tubular (SCOT) GC column technology. Our unsurpassed manufacturing technique allows us to deposit a uniform layer of liquid phase-coated support particles on the inner wall of stainless steel tubing. This technology gives us access to many phases that are inaccessible to conventional fused silica capillary column manufacturing technology. SCOT columns combine the sensitivity and excellent sample resolution of capillary GC with the extensive stationary phase library of packed GC.

All our SCOT columns have dimensions of 50 feet x 1/32 inch O.D. x 0.02 inch I.D. and include 1/16 inch O.D. connections at each end. They are banded in 3.5 inch coils, with 12 inch loose column at each end. Four columns are available as stock items. Columns with other phases may be available through our custom program.

Bentone 34/DNDP SCOT

- **Application:** Use for analyses of xylene isomers.
- **USP Code:** None
- **Phase:** Bentone 34/di-n-decyl phthalate
- **Temp. Limits:** 10 °C to 150 °C (isothermal or programmed)

TCEP SCOT

- **Application:** Use for analyses of aromatic analytes.
- **USP Code:** None
- **Phase:** 1,2,3-Tris(2-cyanoethoxy)propane
- **Temp. Limits:** 0 °C to 150 °C (isothermal or programmed)

BMEA SCOT

- **Application:** Use for analyses of olefins.
- **USP Code:** None
- **Phase:** Bis-methoxyethyladipate
- **Temp. Limits:** 25 °C to 100 °C (isothermal or programmed)

Squalane SCOT

- **Application:** Use for boiling point separations.
- **USP Code:** None
- **Phase:** Squalane
- **Temp. Limits:** 20 °C to 120 °C (isothermal or programmed)

#### SCOT Capillary GC Column

Phase	Cat. No.	Qty
Bentone 34/DNDP	23813-U	1 ea
TCEP	23829-U	1 ea
BMEA	23818-U	1 ea
Squalane	23819-U	1 ea