

# Capillary GC Columns and Guard Columns/Retention Gaps

## Ionic Liquid Columns

### NEW PRODUCTS

#### SLB®-IL111 Capillary GC Column

**Application:** This extremely polar ionic liquid column was the world's first commercial column to rate over 100 on our GC column polarity scale. It has very orthogonal selectivity compared to commonly used non-polar and intermediate polar columns, providing increased selectivity for polar and polarizable analytes. Its temperature limit of 270 °C is very impressive for such an extremely polar column. The 60 m version is excellent at resolving benzene and other aromatics in gasoline. The 100 m version is suitable for detailed cis/trans FAME isomer analysis, and is a great complementary column to the SP-2560. Launched in 2010.

**USP Code:** None

**Phase:**

- Non-bonded
- 1,5-Di(2,3-dimethylimidazolium)pentane bis(trifluoromethylsulfonyl)imide

**Temp. Limits:**

- 50 °C to 270 °C (isothermal or programmed)

I.D. (mm)	d <sub>f</sub> (μm)	Length (m)	Beta Value	Cat. No.	Qty
0.10	0.08	15	313	<a href="#">28925-U</a>	1 ea
0.25	0.20	30	313	<a href="#">28927-U</a>	1 ea
	0.20	60	313	<a href="#">28928-U</a>	1 ea
	0.20	100	313	<a href="#">29647-U</a>	1 ea

## MS-Grade Columns

SLBms columns are designed for GC and GC-MS analysts who require low bleed, inert, durable, and consistent capillary GC columns. SLBms columns will help your laboratory achieve low detection limits, easy mass spectral identification, less instrument downtime, great resolution, short analysis times, and long column life.

#### SLB®-5ms Capillary GC Column

**Application:** The 5% phenyl equivalent phase provides a boiling point elution order with a slight increase in selectivity, especially for aromatic compounds. The low bleed characteristics, inertness, and durable nature make it the column of choice for environmental analytes (such as semivolatiles, pesticides, PCBs, and herbicides) or anywhere a low bleed non-polar column is required.

**USP Code:** This column meets USP G27 and G36 requirements.

**Phase:**

- Bonded and highly crosslinked
- Silphenylene polymer virtually equivalent in polarity to poly(5% diphenyl/95% dimethyl siloxane)

**Temp. Limits:**

- ≤0.32 mm I.D.: -60 °C to 340 °C (isothermal) or 360 °C (programmed)
- ≥0.53 mm I.D.: -60 °C to 330 °C (isothermal) or 340 °C (programmed)

I.D. (mm)	d <sub>f</sub> (μm)	Length (m)	Beta Value	Cat. No.	Qty
0.10	0.10	10	250	<a href="#">28465-U</a>	1 ea
	0.10	15	250	<a href="#">28466-U</a>	1 ea
0.18	0.18	20	250	<a href="#">28564-U</a>	1 ea
	0.30	12	150	<a href="#">28566-U</a>	1 ea
	0.30	30	150	<a href="#">28575-U</a>	1 ea
	0.36	20	125	<a href="#">28576-U</a>	1 ea
0.20	0.20	30	250	<a href="#">28513-U</a>	1 ea

I.D. (mm)	d <sub>f</sub> (μm)	Length (m)	Beta Value	Cat. No.	Qty
0.25	0.10	30	625	<a href="#">28467-U</a>	1 ea
	0.25	15	250	<a href="#">28469-U</a>	1 ea
	0.25	30	250	<a href="#">28471-U</a>	1 ea
	0.25	60	250	<a href="#">28472-U</a>	1 ea
	0.50	15	125	<a href="#">28577-U</a>	1 ea
	0.50	30	125	<a href="#">28473-U</a>	1 ea
	0.50	60	125	<a href="#">28474-U</a>	1 ea
	1.00	30	63	<a href="#">28476-U</a>	1 ea
	0.32	0.25	15	320	<a href="#">28557-U</a>
0.25		30	320	<a href="#">28482-U</a>	1 ea
0.32		30	250	<a href="#">28532-U</a>	1 ea
0.50		15	160	<a href="#">28597-U</a>	1 ea
0.50		30	160	<a href="#">28484-U</a>	1 ea
1.00		30	80	<a href="#">28487-U</a>	1 ea
0.53	0.50	30	265	<a href="#">28541-U</a>	1 ea
	1.00	30	132	<a href="#">28559-U</a>	1 ea

## Fast GC Columns

**Increase Sample Throughput without Sacrificing Quality**

Analytical GC chemists are continually striving to reduce analysis times, because shorter analysis times increase sample throughput, which translates to the completion of more billable samples per shift. However, any decrease in analysis time must not diminish the resolution necessary to adequately resolve peaks of interest, and identify specific elution patterns. Applying the Principles of Fast GC to any application can achieve both objectives. A wide variety of columns are offered in Fast GC dimensions.

### Special Purpose Columns

- **SPB-624:** For environmental volatiles. Maximum temperature of 250 °C (isothermal or programmed).
- **VOCOL:** For environmental volatiles. Maximum temperature of 250 °C (isothermal or programmed).
- **SLB-5ms:** For environmental semivolatiles, pesticides, and PCBs. Maximum temperature of 340 °C (isothermal) or 360 °C (programmed).
- **Equity-1701:** For environmental pesticides and PCBs. Maximum temperature of 280 °C (isothermal or programmed).
- **Omegawax:** For food and beverage omega 3 and omega 6 FAMES. Maximum temperature of 280 °C (isothermal or programmed).
- **SP-2560:** For food and beverage cis/trans FAME isomers. Maximum temperature of 250 °C (isothermal or programmed).

I.D. (mm)	d <sub>f</sub> (μm)	L (m)	Beta Value	Cat. No.	Qty
<b>SPB®-624 Capillary GC Column</b>					
0.18	1.00	20	45	<a href="#">28662-U</a>	1 ea
<b>VOCOL® Capillary GC Column</b>					
0.18	1.00	20	45	<a href="#">28463-U</a>	1 ea
<b>SLB®-5ms Capillary GC Column</b>					
0.10	0.10	10	250	<a href="#">28465-U</a>	1 ea
	0.10	15	250	<a href="#">28466-U</a>	1 ea
0.18	0.18	20	250	<a href="#">28564-U</a>	1 ea
	0.30	12	150	<a href="#">28566-U</a>	1 ea
	0.30	30	150	<a href="#">28575-U</a>	1 ea
	0.36	20	125	<a href="#">28576-U</a>	1 ea
<b>Equity®-1701 Capillary GC Column</b>					
0.10	0.10	15	250	<a href="#">28343-U</a>	1 ea
<b>Omegawax® Capillary GC Column</b>					
0.10	0.10	15	250	<a href="#">23399-U</a>	1 ea
<b>SP™-2560 Capillary GC Column</b>					
0.18	0.14	75	321	<a href="#">23348-U</a>	1 ea