

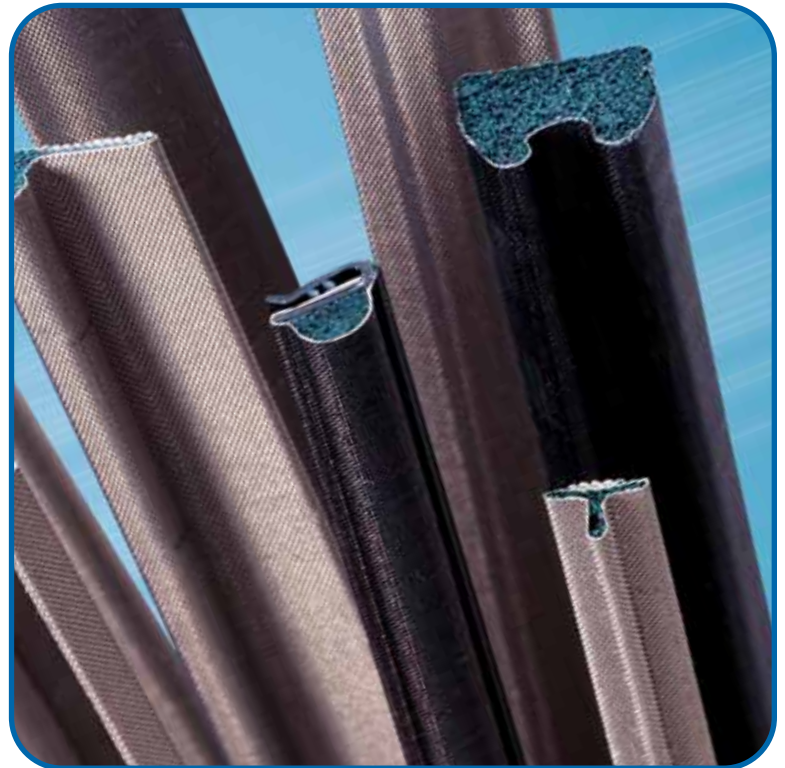
**Schlegel Electronic Materials** (SEM) is the originator of UL 94 VO open-celled bromine-free foam. Driven by market demands to reduce the risk of bromine flame retardants and in compliance with Restriction of Hazardous Substances (RoHS) and Wastes from Electrical and Electronic Equipment (WEEE) directives, SEM gaskets are 100% compliant with these directives; therefore no special treatment or waivers are required by the customer.

### 100% RoHS Compliant

Schlegel Electronic Materials products are marketed around the world. As such we are committed to comply with the European Union Directive 2002/95/EC (RoHS). SEM products and materials have been tested by approved third party facilities and found to be in full compliance with the RoHS threshold limits for Level A and Level B substances.

### The "New" Schlegel Electronic Materials

As the originator of the fabric-clad foam EMI shielding technology, Schlegel Electronic Materials is the industry's most trusted name. SEM continues to set the standard for quality and innovation, designing advanced solutions for a wide range of applications. And our worldwide locations ensure that you get what you need - when and where you need it. From concept to production, the SEM complete portfolio of shielding products combines highly conductive materials with flexible foams and coatings to provide the latest electronic materials containment solutions.



**Schlegel Electronic Materials** objective is to ensure that its customers have a competitive edge - by offering the highest quality and most cost-effective products conveyed with the highest level of customer service.

[schlegelemi.com](http://schlegelemi.com)

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shielding products

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## Specifications - UL 94 VO Bromine Free Foam

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SEM proprietary "Flame Retardant" open-cell polyester polyurethane foam (VO) has been rated UL 94 VO in accordance with Underwriters Laboratories Inc. Plastics Recognized Component program. See Underwriters Laboratories website: [www.ul.com](http://www.ul.com) for additional information regarding minimum dimensions and product ratings. Note: NO polybrominated biphenyls or polybrominated diphenyl ethers are used in any SEM flame-retardant additives or coatings.

### Physical Performance:

Compression set for FR (UL 94 VO) foam: <5% at ambient temperature, and <20% at 70°C (158°F) when compressed 50% of free height for a period of 22 hours.

### Foam Specifications:

General Service Temperature: -40°C (-40°F) to 70°C (158°F) in accordance with ASTM D 3574 'Standard Test Flexible Cellular Materials,' including Urethane foams.

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## Specifications - C70 Cladding

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### Material Specifications:

Bromine-Free Foam with Nickel/Copper C70 fabric

Cladding: Nickel/Copper C70 (polyester ripstop)

Surface Resistivity (ASTM F390 modified):  $\leq 0.066 \Omega/\square$  and  $CpK \geq 2.0$

### Shielding Effectiveness:

Shielding performance of 1/4" x 3/8" gasket per MIL-G-83528B in frequencies of 20 MHz to 10 GHz: **96dB** (average). Note: Gasket geometry and application determine actual shielding effectiveness.

**Contact Resistance:** (SEM LP-3001): 0.11  $\Omega$ -inch at 1 Kg load/inch

**Abrasion Resistance:** (ASTM D3884): No change in surface resistivity: 1,000 cycles

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## Specifications - C12 Cladding

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### Material Specifications:

Bromine-Free Foam with Nickel/Copper C12 fabric

Cladding: Nickel/Copper C12 (polyester plain weave)

Surface Resistivity (ASTM F390 modified):  $\leq 0.02\Omega/\square$  and  $CpK \geq 2.0$

### Shielding Effectiveness:

Shielding performance per MIL-G 83528B in frequencies of 20 MHz to 10 GHz: **97.4 dB** (average). Note: Gasket geometry and application determine actual shielding effectiveness.

**Contact Resistance:** (SEM LP-3001): 0.08  $\Omega$ -inch at 1 Kg load/inch

**Abrasion Resistance:** (ASTM D3884): No change in surface resistivity: 1,000 cycles

## Fabric-Over-Foam Gaskets

Schlegel Electronic Materials offers over 200 different profiles to meet all of your shielding needs. From standard rectangular to C-fold, D-shape, L-shape, P-shape, and others – SEM will design the ideal shielding gasket to meet your needs.