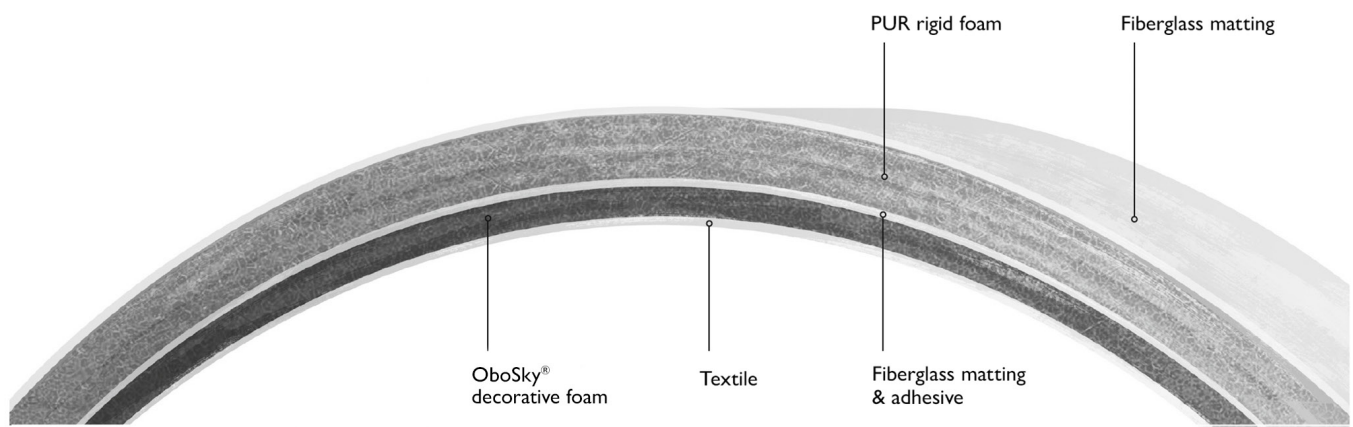
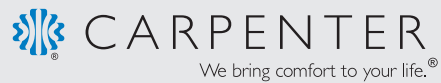




OBoSky® Product Benefits

-  Ideal surface structure: Extremely homogeneous cell structure with very fine pores, comparable with ester-based PUR foams. Also suitable for textiles with a low basis weight.
-  Simple processing: Good flame and adhesive lamination properties.
-  Long life cycle: Excellent hydrolytic stability and material resistance in full compliance with Daimler standard DBL 5450.
-  Odourless and low emission characteristics: Fulfils the emission and odour test pursuant to Daimler standard DBL 5450 in accordance with measurement methods VDA 278 and VDA 270.
-  Efficient material set: Unique 120 m block technology results in 50% fewer adhesive seams.
-  Made-to-measure assortment: Available in various densities, with or without flame retardancy in accordance with FMVSS 302.
-  Global availability: Available in rolls worldwide in Europe, Asia and USA.



About Carpenter

Founded in 1950, Carpenter Co. is the world's largest vertically integrated manufacturer of polyurethane foams. Carpenter also serves a diversified global marketplace with polyurethane chemical solutions, polyester fibers, and insulation materials through a network of more than 70 production locations. Our 6,500+ employees across the globe seek to provide the most innovative products and solutions with a focus on enhancing the quality of people's lives while being a good steward of our resources.

carpenter.com

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rev. 6/2025



OBoSky® Low-Emission Headliner Foams



Improved Vehicle Interior Climate

Sustainability aspects are an increasingly significant factor in consumer decisions. Many buyers today opt for eco-friendly alternatives when buying a car as well. Not only a low-emission drive system plays a role here, but also an improved vehicle interior climate. Automotive manufacturers are therefore increasingly looking for odourless components with the smallest possible volatile organic content.

Greater Demands on Comfort and Quality

Fewer and fewer customers want to buy a car straight out of the showroom. Just as crucial to many car buyers as low fuel consumption are driving comfort and a stylish interior design. High-quality materials with even surfaces and a soft-touch feeling contribute to the feel-good experience. For automotive manufacturers, it is naturally important that such materials not only look appealing, but are also durable and easy to process.

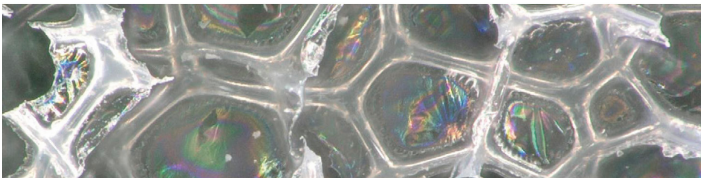
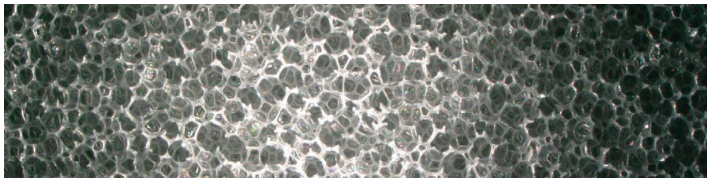
Innovative Foams for Headliners

Due to their good processing properties, ester-based polyurethane foams are mainly used for headliners. Up to now, less preference has been given to traditional ether-based polyurethane foams.

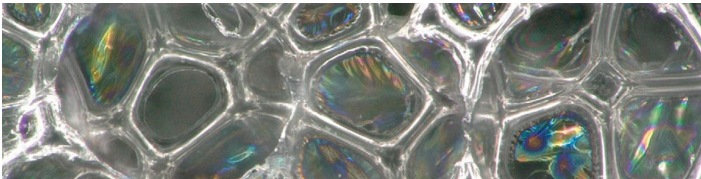
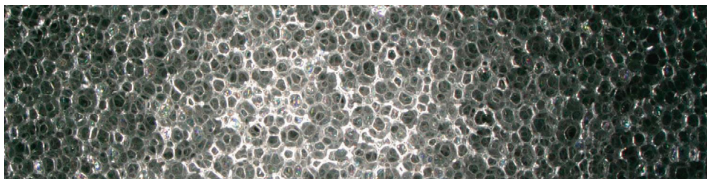
Carpenter has developed a new foam technology based on an ether-based prepolymer to meet the increased requirements in the automotive sector, and in particular for headliners. This new patented technology* combines, so to speak, the advantages of ester-based polyurethane foams with the properties of ether-based materials. The new products from the OBoSky® foam family are therefore not only hydrolytically stable with low emissions and minimum odour, but also have good flame lamination characteristics as well as an extremely homogeneous cell structure, with which ideal surface results can be achieved.



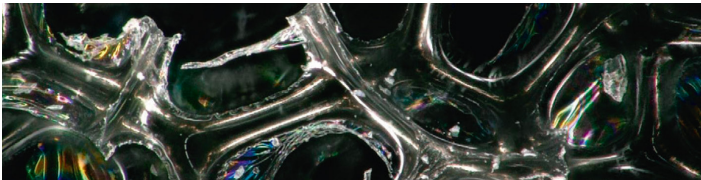
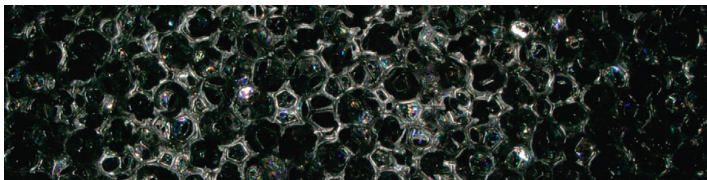
Innovative Foam Solutions Based on Prepolymer Technology



Microscopic image of OBoSky® 2950 T foam (30 kg/m³) - 20x magnification and 200x magnification



Microscopic image of ester foam (30 kg/m³) - 20x magnification and 200x magnification



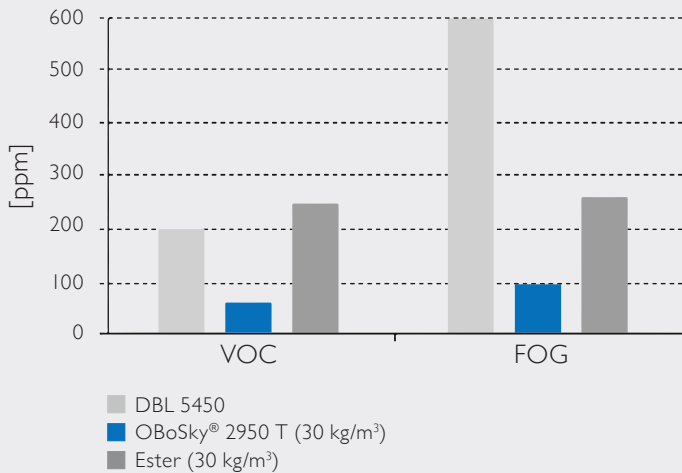
Microscopic image of ether foam (30 kg/m³) - 20x magnification and 200x magnification

Homogeneous Cell Structure with Fine Pores

The microscopic images show that the OBoSky® foam has finer pores than standard ether foam and a similar structure to the ester product.

Low Emission Values

The VOC and fogging content of OBoSky® foam 2950 T lies far below the thresholds for DBL 5450. The VOC/FOG values refer to typical average measured values.



OBoSky® Foam Assortment

Product	Net Density	Compression load deflection	Tensile strength	Elongation at break	Elongation at break
	[kg/m3] ISO 845	[kPa] ISO 3386-I	[kPa] ISO 1798	[%] ISO 1798	[%] ISO 1856
OBoSky® 2950 T Basic	29	5	> 90	> 130	< 7
OBoSky® 2950 T	30	4	> 90	> 130	< 7
OBoSky® 2950 C *	30	4	> 90	> 130	< 7
OBoSky® 3540 T	35	4	> 90	> 150	< 6
OBoSky® 4270 T	42	7	> 150	> 100	< 7
OBoSky® 4248 T	42	4.8	> 90	> 150	< 7

Product	Fine pore structure	Hydrolytic stability	Low emissions	Odourless	Flame retardancy	OEM approval
		DBL 5450	VDA 278	DBL 5450	FMVSS 302	
OBoSky® 2950 T Basic	✓	✓		✓		GM
OBoSky® 2950 T	✓	✓	✓	✓	✓	Daimler
OBoSky® 2950 C *	✓	✓	✓	✓	✓	Daimler
OBoSky® 3540 T	✓	**	✓	**	✓	**
OBoSky® 4270 T	✓	✓	✓	✓	✓	**
OBoSky® 4248 T	✓	✓	✓	✓	✓	**

Other volume weights available on request.

* Production Changzhou, China

** currently being tested by renowned OEMs