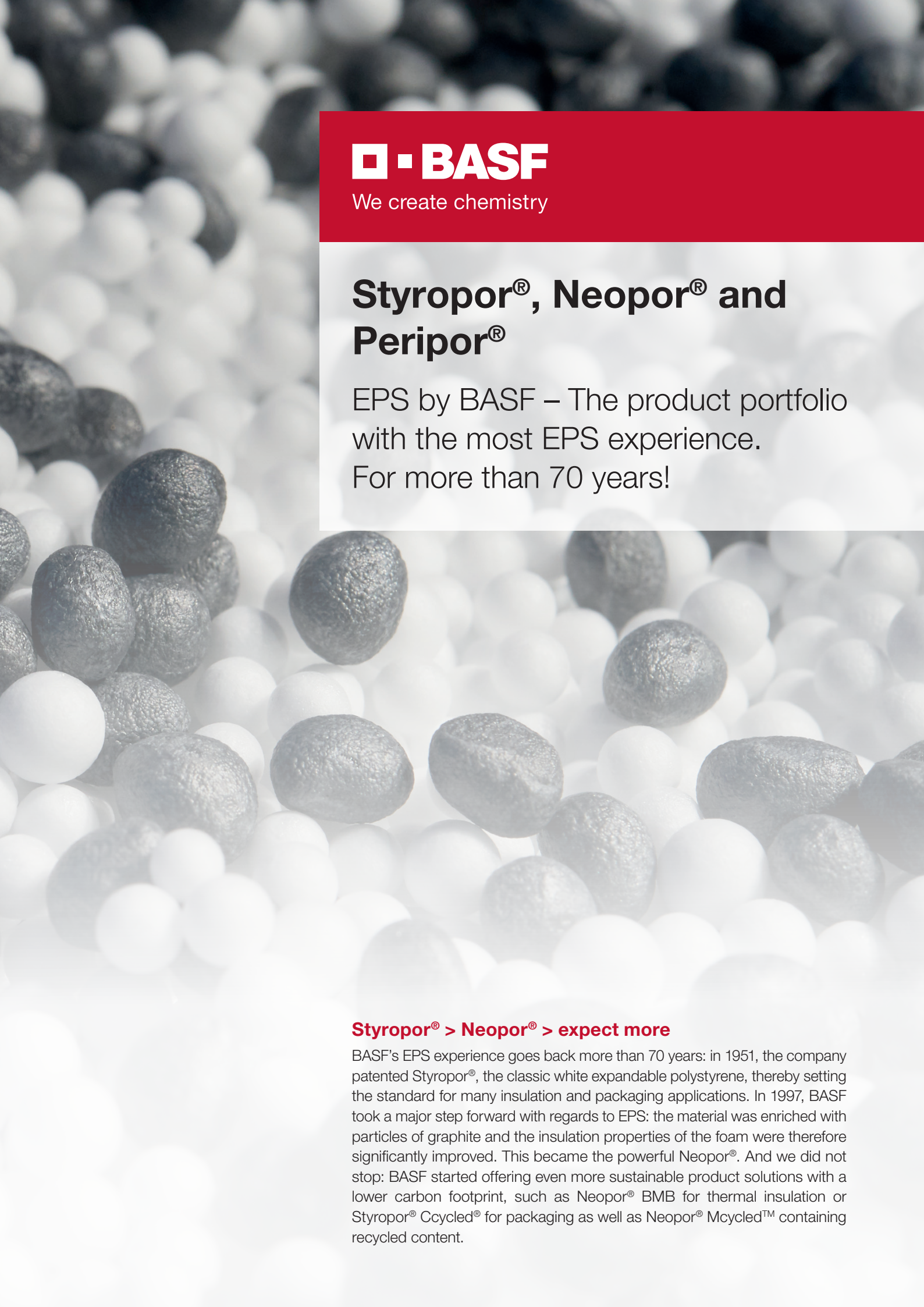

We create chemistry

Styropor®, Neopor® and Peripor®

EPS by BASF – The product portfolio with the most EPS experience.
For more than 70 years!

Styropor® > Neopor® > expect more

BASF's EPS experience goes back more than 70 years: in 1951, the company patented Styropor®, the classic white expandable polystyrene, thereby setting the standard for many insulation and packaging applications. In 1997, BASF took a major step forward with regards to EPS: the material was enriched with particles of graphite and the insulation properties of the foam were therefore significantly improved. This became the powerful Neopor®. And we did not stop: BASF started offering even more sustainable product solutions with a lower carbon footprint, such as Neopor® BMB for thermal insulation or Styropor® Ccycled® for packaging as well as Neopor® Mcycled™ containing recycled content.

A Complete Product Range for All Construction and Packaging Applications

For conventional EPS insulation applications, BASF's range includes the Styropor® F 15 R product types. Peripor® rounds out BASF's offering for the construction segment. With its short cycle times during processing and its low water absorption, the product fulfills the most demanding requirements.

In addition, BASF serves the packaging industry with its EPS product range: The products of the Styropor® P 26 series are characterized by their mechanical strength.

Product	Flame retardant	Block-moulding	Shape-moulding	Loose filling	Insulation performance	Bead size range (mm)	Typical application density (kg/m³)	Typical applications
Styropor® F 15 R Pentane content: ~5.3 %								
Styropor® F 215 R	✓	✓		✓	+	1.0 - 2.0	≤12* - 25	Exterior insulation (ETICS), wall and floor insulation
Styropor® F 215 R-L	✓	✓		✓	+	1.0 - 2.0	≤11* - max. 15	Only for low density applications (e.g. impact sound insulation, low density spacers in construction elements, loose beads)
Styropor® F 315 R	✓	✓	✓		+	0.7 - 1.0	16 - 30	Roof, wall and floor insulation, insulating concrete forms (ICF)
Styropor® F 315 R-L	✓	✓	✓		+	0.7 - 1.0	15 - 25	Roof, wall and floor insulation, foam cut-outs and contour cutting
Styropor® F 415 R	✓		✓		+	0.4 - 0.7	20 - 30	Decorative ceiling panels, technical mouldings
Peripor® R Pentane content: ~5.3 %								
Peripor® 200 R	✓	✓	✓		+	1.0 - 2.0	22 - 30	Perimeter insulation, flat roof insulation, sanitary components
Peripor® 300 R	✓		✓		+	0.7 - 1.0	25 - 30	Perimeter insulation, flat roof insulation, sanitary components
Styropor® P 26 Pentane content: ~6.0 %								
Styropor® P 226 C		✓	✓		○	0.9 - 1.3	10* - 30	Insulation without flame-retardant requirement, packaging, blocks for contour cutting
Styropor® P 326			✓		○	0.7 - 0.9	16 - 30	Packaging, insulated containers (e.g. fish boxes)
Styropor® P 326 C			✓		○	0.7 - 0.9	18 - 50	For cycletime-optimized production of mouldings
Styropor® P 426			✓		○	0.4 - 0.7	18 - 30	For thin-walled mouldings
Styropor® P 426 C			✓		○	0.4 - 0.7	20 - 50	For cycletime-optimized production of thin-walled mouldings
Styropor® P 656				✓	○	0.2 - 0.4	12 - 25	Aggregate for lightweight plaster and bitumen sealing compounds

* by double pass expansion

also available as BMB-certified product

BASF's Neopor® brand features the broadest product portfolio in the grey EPS segment and thus supplements the traditional Styropor® range. It stands out with its improved product characteristics and therefore enables more efficient insulation solutions, resulting in a better ratio between cost and insulation value.

Neopor® is produced using two technologies: polymerization and extrusion. The product range comprises the Neopor® F 2000 series and the Neopor® F 5000 series.

Neopor® F 2000:

- Produced by polymerization
- In the market since 1998
- Characterized by a silver-grey color and spherical particles

Neopor® F 5000:

- Produced by extrusion
- In the market since 2009
- Characterized by good processing properties
- Neopor® F 5200 Plus/F 5300 Plus and Neopor® P 5200 with optimized insulation performance
- Neopor® F 5 PRO with optimized cycle time and water uptake
- Neopor® F 5 Mcycled™ with a post consumer EPS recycled content of 10 %

Product	Flame retardant	Block-moulding	Shape-moulding	Loose filling	Insulation performance	Bead size range (mm)	Typical application density (kg/m³)	Typical applications
Polymerization – Neopor® 2000 Pentane content: ~5.3 %								
Neopor® F 2200	✓	✓		✓	++	1.4 - 2.5	12* - 25	Exterior insulation (ETICS), cavity wall insulation
Neopor® F 2300	✓	✓	✓	✓	++	0.8 - 1.4	12* - 25	Exterior insulation (ETICS), flat roof insulation, cavity wall insulation, attic insulation, ceiling insulation, steep roof insulation
Neopor® F 2400	✓		✓		++	0.5 - 0.8	16 - 24	Insulating concrete forms (ICF), technical mouldings, insulation containers
Neopor® F 4 Speed	✓	(✓)	✓		++	0.5 - 0.8	22 - 30	For cycletime-optimized production of blocks and mouldings in the medium and high density range
Extrusion – Neopor® 5000								
Pentane content: ~5.3 %								
Neopor® P 5200		✓		✓	+++	1.2 - 1.6	10* - 20	Interior insulation, cavity wall insulation, applications without flame-retardant requirements
Neopor® F 5300 Plus	✓	✓	✓	✓	+++	0.9 - 1.4	12* - 20	Exterior insulation (ETICS), flat roof insulation, attic insulation, cavity wall insulation
Pentane content: ~5.5 %								
Neopor® F 5200	✓	✓		✓	++	1.2 - 1.6	12* - 25	Exterior insulation (ETICS), interior insulation, attic insulation, ceiling insulation, steep roof insulation, cavity wall insulation
Neopor® F 5200 Plus	✓	✓		✓	+++	1.2 - 1.6	12* - 20	Exterior insulation (ETICS), cavity wall insulation
Neopor® F 5 Mcycled™**	✓	✓		✓	+++	1.2 - 1.6	12* - 18	Exterior insulation (ETICS), cavity wall insulation
Pentane content: ~4.5 %								
Neopor® F 5 PRO	✓	✓	✓		++	0.9 - 1.4	25 - 35	Perimeter insulation, flat roof insulation

* by double pass expansion
** post consumer EPS recycled content 10 %

also available as BMB-certified product

Product groups	Key properties
Styropor® P 26 (not flame retardant)	■ Particularly energy-efficient operation, short cycle times, close density distribution ■ Foam suitable for direct contact with food (except for Styropor® P 656)
Styropor® F 15 R (flame retardant)	■ Universally applicable for all building and construction applications as well as for technical shape mouldings ■ Reduced blowing agent content ■ Foams with favorable insulation properties ■ Foams fulfill the requirements of Class E according to EN 13501-1
Peripor® R (flame retardant)	■ Short cycle times, for medium to high densities, close density distribution ■ Reduced blowing agent content ■ Foams producible with particularly low water absorption in immersion test and in diffusion test ■ Foams fulfill the requirements of Class E according to EN 13501-1
Neopor® F 2000 (flame retardant)	■ Energy-efficient operation, optimal expandability, low densities, close density distribution ■ Silver-grey foams with particularly favorable thermal insulation properties ■ Foams fulfill the requirements of Class E according to EN 13501-1
Neopor® F 5000 (flame retardant)	■ Energy-efficient operation, short cycle times, low densities, close density distribution ■ Grey foams with particularly favorable thermal insulation properties ■ Foams fulfill the requirements of Class E according to EN 13501-1
Neopor® F 5 PRO (flame retardant)	■ Short cycle times, for medium to high densities, close density distribution ■ Foams producible with particularly low water absorption in immersion test and in diffusion test ■ Reduced blowing agent content ■ Grey foams with particularly favorable thermal insulation properties ■ Foams fulfill the requirements of Class E according to EN 13501-1
Neopor® P 5200 (not flame retardant)	■ Energy-efficient operation, optimal expandability, low densities, close density distribution ■ Grey foams with particularly favorable thermal insulation properties
Neopor® F5 Mcycled™ (flame retardant)	■ REDcert² certified Post Consumer EPS Recycled Content ■ Energy-efficient operation, short cycle times, low densities, close density distribution ■ Grey foams with particularly favorable thermal insulation properties ■ Foams fulfill the requirements of Class E according to EN 13501-1

Our sustainable EPS solutions

	Neopor® / Styropor® BMB	Neopor® Mcycled™	Styropor® Ccycled®
Recycled content	**Virtually allocated feedstock (Biomass Balance)**	**Mechanically recycled EPS**	**Virtually allocated feedstock (ChemCycling™)**
Approach	Mass balance approach	Physical traceability	Mass balance approach
Feedstock	Renewable feedstock	Post-consumer EPS waste	Post-consumer plastic waste (mixed plastic waste & tyres)
Benefits	Low Carbon EPS	Contribution of mechanical recyclability of EPS	Circularity of plastics
Properties	Identical chemical & physical properties	Similar properties	Identical chemical & physical properties
Processing at customers	Drop-in solution: It can be processed together with standard products	Dedicated production needed	Drop-in solution: It can be processed together with standard products
Application	**Construction & Packaging**	**Construction**	**Packaging**

BASF's biomass balance approach

Styropor® and Neopor® BMB

The Styropor® and Neopor® BMB grades are produced under the mass balance approach. The EPS Biomass Balance grades have the same final properties as the standard Styropor® and Neopor® portfolio by BASF. Also, the processing remains the same.

BASF's BMB products are manufactured by replacing fossil feedstock with an equivalent amount of renewable resources at the very beginning of the value chain. This kind of production saves fossil resources and further improves the positive sustainability profile of EPS. The attribution of the renewable share of feedstock according to a mass balance approach is certified by REDcert².

Find out more about our biomass balance approach: www.neopor.com

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Further information available at: **www.neopor.com** and **styropor.com**