

melos

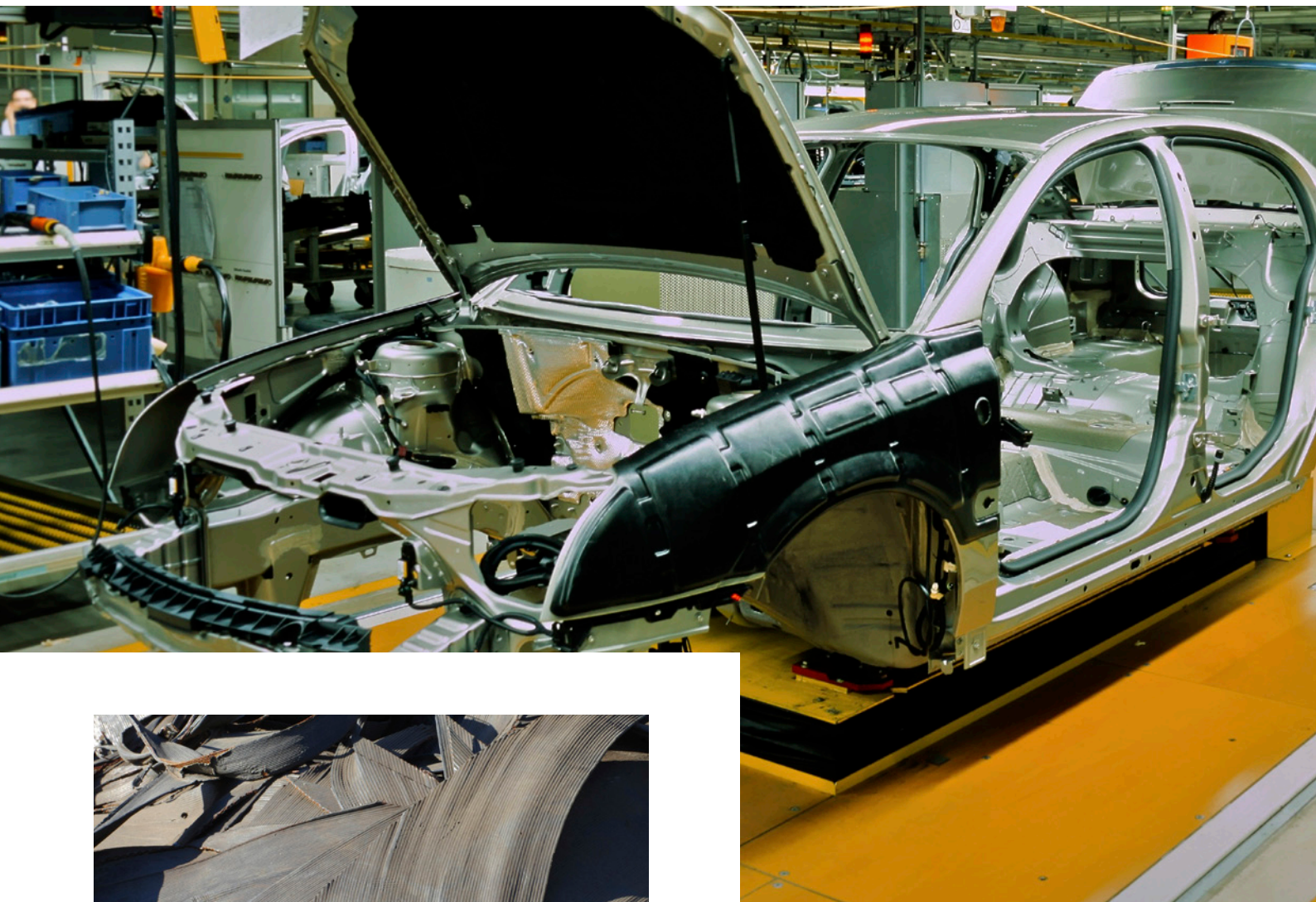


RECYCLED GRANULES

Re-used material for
elasticity and safety

polytan

WE MAKE SPORT.



Recycling from technical virgin material – **Post Industrial***

WASHING MACHINE SEALS



Recycled Granules
**Technical
EPDM grey**

0.5 – 2.5 mm

SEALS, HOSES AND SIMILAR



Recycled Granules
**Technical
EPDM black**

0.5 – 2.5 mm
1.0 – 4.0 mm



Recycled Granules
**Technical SBR
black**

0.5 – 2.5 mm
1.0 – 3.0 mm
1.0 – 4.0 mm
1.0 – 5.0 mm
2.0 – 6.0 mm
2.0 – 8.0 mm



Recycled Granules
**Technical
Fiber granules
black**

1.0 – 8.0 mm



Recycled Granules
Technical rubber powder

EPDM

SBR

0.0 – 0.6 mm
0.0 – 0.8 mm

0.0 – 0.6 mm
0.0 – 0.8 mm






* All purchased post-industrial products are usually sulfur-crosslinked. However, the formulation of post-industrial products is not subject to Melos GmbH.








Origin and quality

The right mixture for every application.

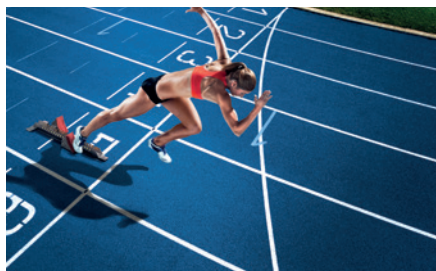
Recycled granules used in the market often come from different sources – therefore, they can be sold unsorted (blend). Both the EPDM products and the recycled rubber products sourced through Melos do not typically come from recycled waste materials, but are generated directly in new production as high-quality scrap material, for example.

	Technical EPDM grey 	Technical EPDM black 	Technical SBR black 	Technical fiber granules black 	Technical rubber powder EPDM and SBR 
Sports facility construction		■	■		
Playground, fall protection substructure		■	■	■	
Artificial turf	■		■		
Animal stables, fall protection mats			■		
Bullet trap in shooting ranges	■				
Road construction					■
Ship decks		■	■		

	Technical EPDM grey 	Technical EPDM black 	Technical SBR black 	Technical fiber granules black 	Technical rubber powder EPDM and SBR 
Description	Comparable to Recycled Granules	Blend Recycled EPDM products	Blend Recycled Granules	Blend of fibers and granules	Blend Recycled Granules
Origin	Production offcuts from the manufacture of high-quality recycled granules				by-product
Typical grain sizes					
Grain size 0.0 – 0.6 mm					■
Grain size 0.0 – 0.8 mm					■
Grain size 0.5 – 2.5 mm	■	■	■		
Grain size 1.0 – 3.0 mm			■		
Grain size 1.0 – 4.0 mm		■	■		
Grain size 1.0 – 5.0 mm			■		
Grain size 1.0 – 8.0 mm			■		
Typical bulk density in g/l (ca. ± 10%) ^{1,2}	475	450	450	460	–

¹ The bulk density of a material is the weight per unit volume of the bulk material. Bulk density measured according to DIN EN ISO 60: Determination of the apparent density of molding compounds that can flow through a standardized funnel.

² Value may be subject to significant fluctuations due to the origin of the material and/or varying composition.



Sports facility construction

Recycled granules are often used as an elastic layer in sports flooring. Here, the materials fulfill elastic and shock-absorbing properties.



Playground, fall protection substructure

Recycled granules are also used as an elastic layer in recreational flooring, ensuring the essential elastic and shock-absorbing properties.



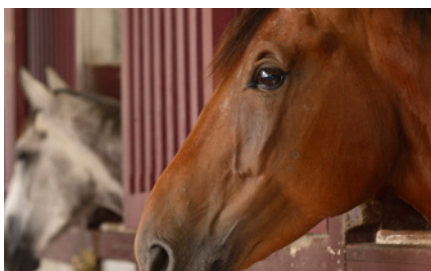
Artificial turf

The material is used in some artificial turf systems as an elastic layer beneath the artificial turf.



Road construction

Recycled granules are used in road construction projects, where they are mixed with modified asphalt as low-noise asphalt or as a filler for elastic layers and then laid.



Animal stables, fall protection mats

Recycled granules are used in stables as paddock mats or trailer coatings. They ensure that the animals have a good, secure footing.



Ship decks

Floor coverings that come into contact with water or other liquids are often made from recycled granules to provide slip resistance.



Bullet trap in shooting ranges

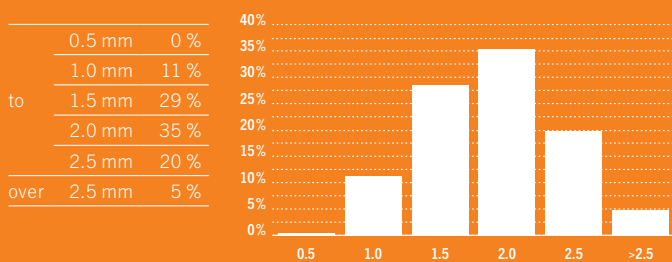
Due to its viscoelastic and force-absorbing properties, the material is also used as bullet traps at shooting ranges.

TYPICAL GRAIN SIZE DISTRIBUTION

Sieve curve comparison of available products

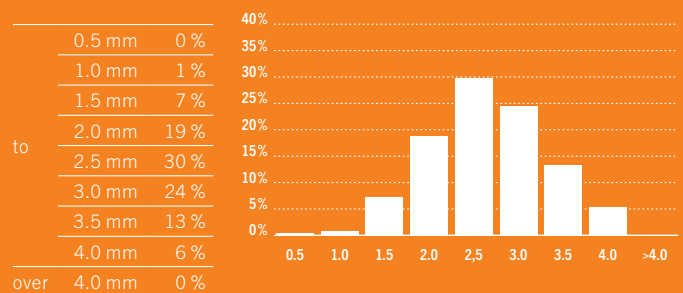
0.5 – 2.5 mm

Technical EPDM grey +
Technical SBR black



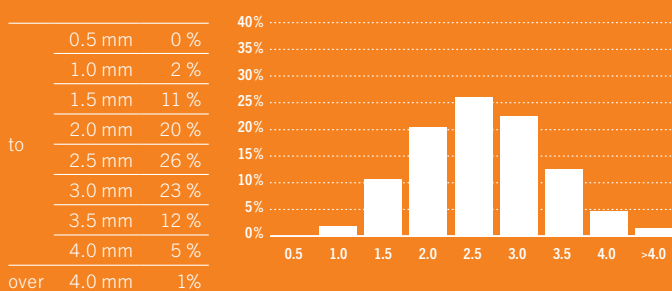
1.0 – 3.0 mm

Technical SBR black



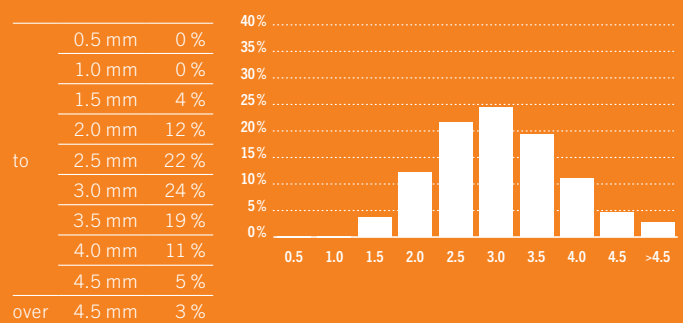
1.0 – 4.0 mm

Technical EPDM black



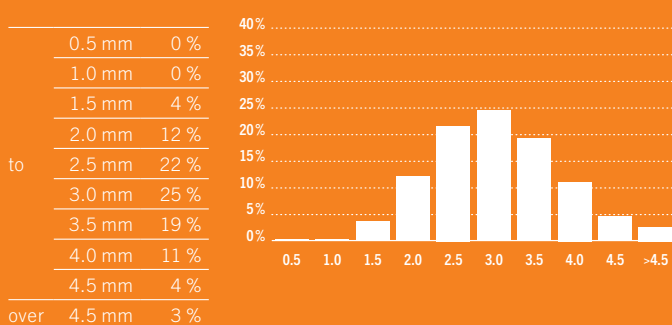
1.0 – 4.0 mm

Technical SBR black



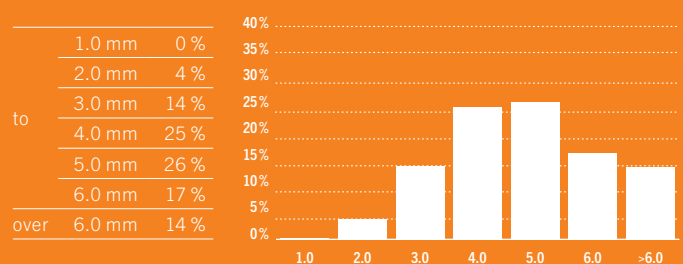
1.0 – 5.0 mm

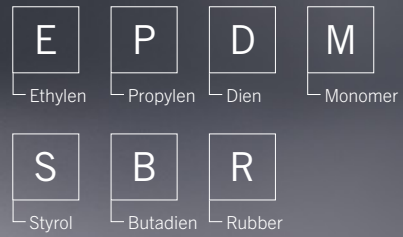
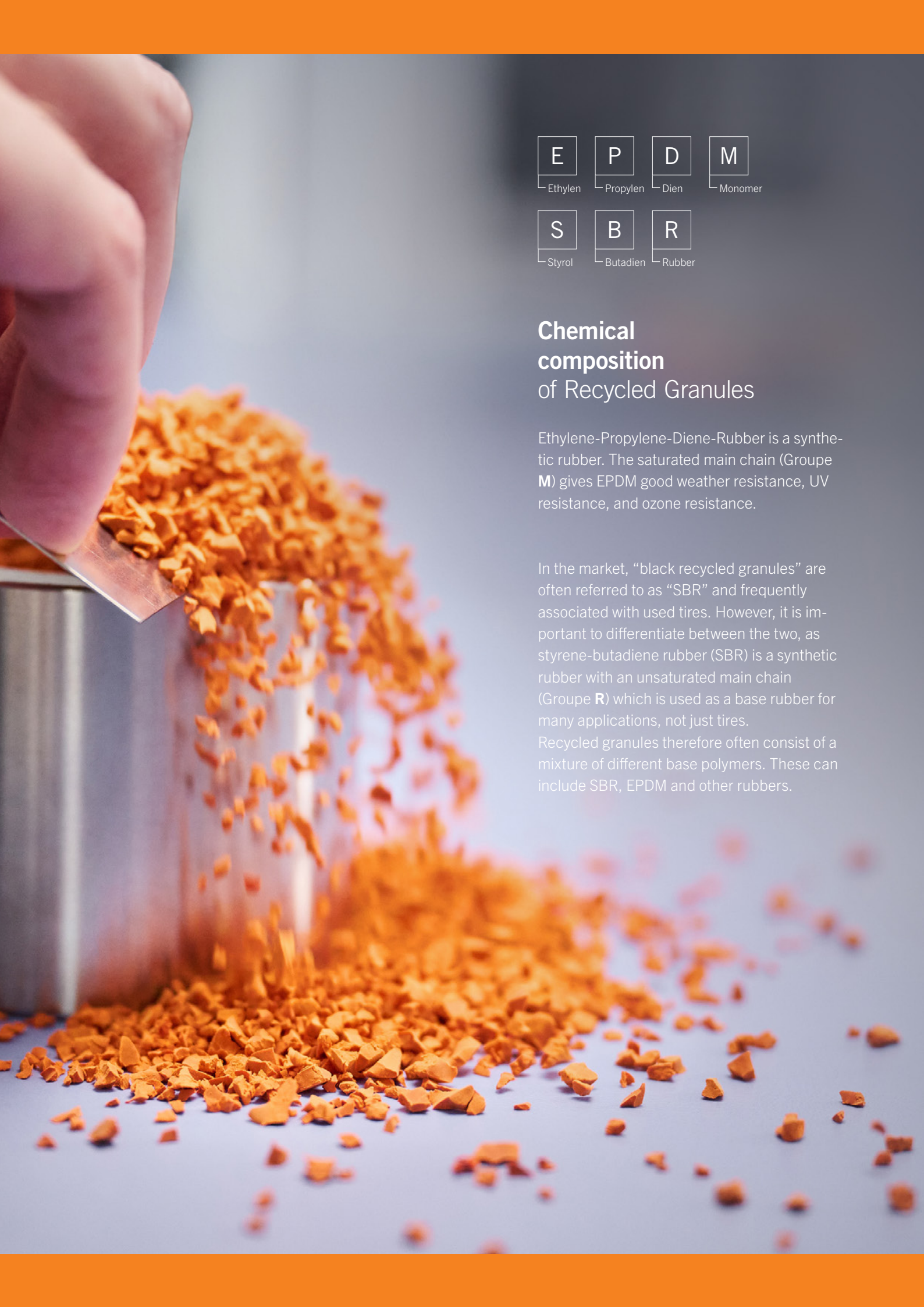
Technical SBR black



1.0 – 8.0 mm*

Technical fiber granules
black





Chemical composition of Recycled Granules

Ethylene-Propylene-Diene-Rubber is a synthetic rubber. The saturated main chain (Groupe **M**) gives EPDM good weather resistance, UV resistance, and ozone resistance.

In the market, “black recycled granules” are often referred to as “SBR” and frequently associated with used tires. However, it is important to differentiate between the two, as styrene-butadiene rubber (SBR) is a synthetic rubber with an unsaturated main chain (Groupe **R**) which is used as a base rubber for many applications, not just tires.

Recycled granules therefore often consist of a mixture of different base polymers. These can include SBR, EPDM and other rubbers.

