

melos



SPORT
ZONE

RECYCLED GRANULES

Re-used material for elasticity
and safety!

Recycled Granules

ORIGIN AND QUALITY

Recycled granules, that are used in the market, often come from different sources – these can be subsequently distributed as unsorted (blended). Neither the EPDM products nor the technical products through Melos normally originate from recycled used material. Rather they accrue during new production, e.g. as high-grade blended material.



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 FIBRE BLACK

1.0 - 8.0 mm

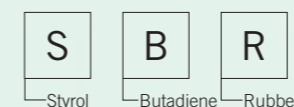
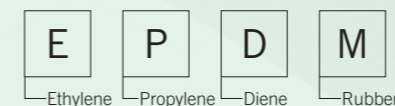


RECYCLED GRANULES
TECHNICAL RUBBER POWDER

EPDM	SBR
0.0 - 0.6 mm	0.0 - 0.6 mm
0.0 - 0.8 mm	0.0 - 0.8 mm

CHEMICAL COMPOSITION OF RECYCLED GRANULES

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



In the market „black recycling granules“ are frequently referred as „SBR“ and are often associated with old tyres. However, upon closer examination it makes sense to differentiate, since Styrol-Butadiene-Rubber (SBR) is a synthetic rubber with an unsaturated main chain (R-Rubber), that can be used for many applications (not merely tyres) as the basic rubber. For that reason, recycling granules are often made of a mixture of different basis polymers. That can include SBR, EPDM and other rubbers.

* All purchased post industrial products are normally sulphur-cured. However, with post industrial products the formulation does not underline Melos GmbH.

Road construction
Recycled Granules are used in road construction projects – there the modified asphalt is mixed and installed as low-noise asphalt or as a filler in elastic layers.



Playgrounds, fall protection substructure

Recycled Granules are also often supplied as an elastic layer leisure surfacing. Here, the materials meet the required elastic and (impact) damping properties.



Artificial Turf

The material is used on some artificial turf systems as an elastic layer underneath the artificial turf. Another application area is the use as infill granules in artificial turf systems.



Sports venue construction

Recycled Granules are often supplied as an elastic layer in sports surfacing. Here, the materials meet the required elastic and (impact) damping properties.



Stables, fall protection mats

Recycled Granules are used in stalls as paddock mats or as trailer coatings. They ensure good, safe footing for the animals.



Backstop in shooting ranges

With its visco-elastic and force-absorbing properties, the material is also used as a backstop in shooting areas.



Ship decks

Floor coverings, that come into contact with water and other fluids, are often manufactured as recycled granules to provide skid resistance in these applications.



Applications	Products				
	Technical EPDM grey	Technical EPDM black	Technical SBR black	Technical Fibre black	Technical Rubber Powder EPDM and SBR
Sports venue construction		■	■		
Playgrounds, fall protection substructure		■	■	■	
Artificial Turf	■		■		
Stables, fall protection mats			■		
Backstop in shooting ranges	■				
Road construction					■
Ship decks		■	■		

Products	Technical EPDM grey	Technical EPDM black	Technical SBR black	Technical Fibre black	Technical Rubber powder EPDM and SBR
Description	Comparison with Technical Rubber Granules	Blend of Technical EPDM products	Blend of Recycled Granules	A blend of fibres and granules	Blend of Technical Rubber products
Origin	Production blend from new fabrication of demanding technical rubber products				By-products
Typical grain size					
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 (approx. ± 10%) ^{1,2}	475	450	450	460	–

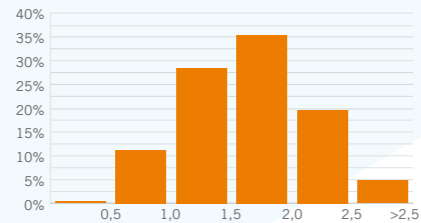
¹ The bulk density of a material is the weight per volume unit of the bulk material. Bulk density measured as per DIN EN ISO 60: Determination of the apparent density of moulding material that could flow through a standardised funnel.
² Due to the material origin and / or fluctuating composition can be subject to significant fluctuations.

TYPICAL GRAIN SIZE DISTRIBUTION

Sieve curve comparison of available products¹

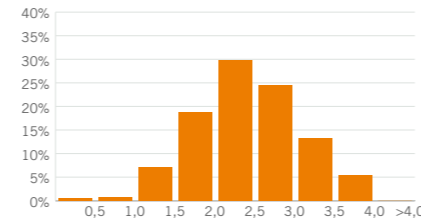
0.5 – 2.5 mm Technical EPDM grey + Technical SBR black

0.5 mm	0 %
1.0 mm	11 %
1.5 mm	29 %
2.0 mm	35 %
2.5 mm	20 %
through 2.5 mm	5 %



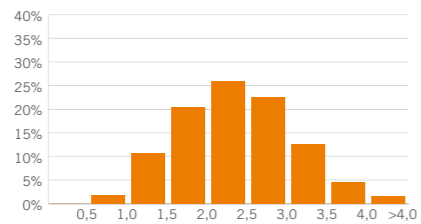
1.0 – 3.0 mm Technical SBR schwarz

0.5 mm	0 %
1.0 mm	1 %
1.5 mm	7 %
2.0 mm	19 %
2.5 mm	30 %
3.0 mm	24 %
3.5 mm	13 %
4.0 mm	6 %
through 4.0 mm	0 %



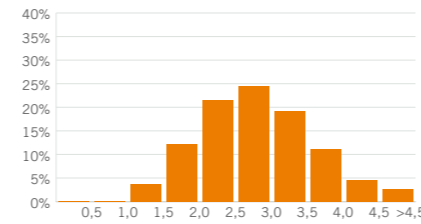
1.0 – 4.0 mm Technical EPDM black

0.5 mm	0 %
1.0 mm	2 %
1.5 mm	11 %
2.0 mm	20 %
2.5 mm	26 %
3.0 mm	23 %
3.5 mm	12 %
4.0 mm	5 %
through 4.0 mm	1 %



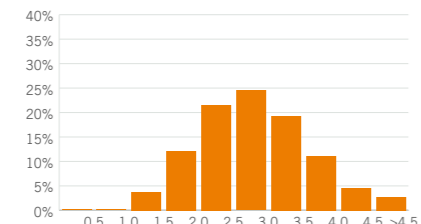
1.0 – 4.0 mm Technical SBR black

0.5 mm	0 %
1.0 mm	0 %
1.5 mm	4 %
2.0 mm	12 %
2.5 mm	22 %
3.0 mm	24 %
3.5 mm	19 %
4.0 mm	11 %
4.5 mm	5 %
through 4.5 mm	3 %



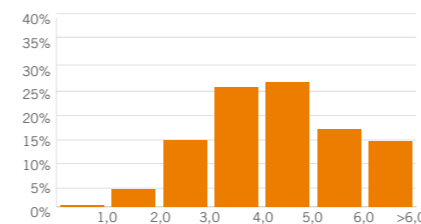
1.0 – 5.0 mm Technical SBR black

0.5 mm	0 %
1.0 mm	0 %
1.5 mm	4 %
2.0 mm	12 %
2.5 mm	22 %
3.0 mm	25 %
3.5 mm	19 %
4.0 mm	11 %
4.5 mm	4 %
through 4.5 mm	3 %



1.0 – 8.0 mm Technical Fibre black

1.0 mm	0 %
2.0 mm	4 %
3.0 mm	14 %
4.0 mm	25 %
5.0 mm	26 %
6.0 mm	17 %
through 6.0 mm	14 %



¹ The bar chart of the demonstrated particle size distribution curve states the average values in mm, measured with an optical grain size measurement system in according to 13322-2.

Package deals with

READY TO BUILD

Profit from our performance and service concept. Receive all products, which are necessary for realising your project, by a single-source delivery. Just a single delivery ensures that all system-relevant products are available for on-site use.

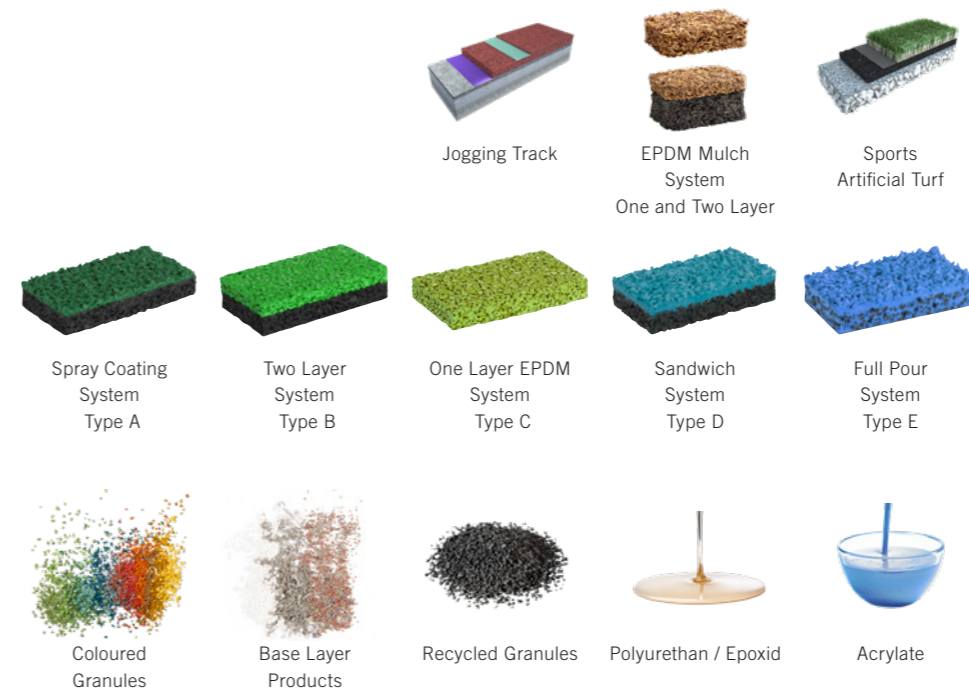
Purchase Recycled Granules from a single-source to save time, costs and effort.

READY TO BUILD

SELECT YOUR APPLICATION.



CHOOSE THE DESIRED SYSTEM.



GET THE RIGHT PRODUCTS FROM US.



melos

**Are you interested in our products?
Do you have any questions?**

If so, get in touch with us today.
We look forward to hearing from you.

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