

Product sheet	Uitgifte datum: 01-01-2016		Garden soil, substrate for soil improvement	
Fields of application		Soil improvement	Landscaping	



Garden soil, substrate for soil improvement

The substrate is composed of several raw materials. The main raw material is peat. Besides, also compost, composted bark, clay and sand with a fine fraction is used. Eventually the substrate can also be fertilised with manure or compost. The substrate is used to compensate the loss of soil by root balls and natural decay of organic matter. The garden soil is applied to revalue the garden. There are several types of substrates. A sandy, peaty, clayey and a standard type of substrate. The choice depends on the type of subsoil.

RAG process requirements

RAG location

The properties of the site may not influence the purity and quality of the product. There are several process requirements established for the RAG location to avoid issues such as:

- Pollution by germinative weeds
- Pollution of the products by the tires, shovels and other equipment
- Pollution of the products by surrounding areas
- Contamination caused by a unhygienic storage
- Mixing or pollution by the surface.

Transport

Products must be transported in a manner that will ensure that their purity and quality continue to comply with the product requirements specified in all applicable general and product-specific requirements.

The cargo space must be checked before product is loaded, to see whether it is clean enough. This must be done by studying records showing what the previous cargo of the means of transport was.

RAG qualitymark

Only companies that join RHP are able to supply substrates with the RAG quality mark. RAG approved substrates can be recognized by the RAG-logo which is stated on the invoice and/or delivery receipt. This gives guarantees concerning the quality of the substrate delivered.



RHP Certification

RHP established in 1963, aims to serve as the European expertise centre in the field of substrates, soil supplies and soil improvement materials. An important activity of RHP is the development and management of labels that are related to these substrates. For the professional growers and gardeners RHP provides stable substrates to guarantee optimal condition of the soil.

The quality mark RAG Soil improvement can be used in nurseries where the soil is removed with the root balls. The quality mark RAG Landscaping focuses on maintainers of public parks and gardeners. Tree Sand, Tree granules and Garden soil are products that RAG can be certified. The quality mark is awarded to producers, traders and importers of raw materials and substrates. The RHP quality marks guarantees the quality of growing media in the chain, from raw materials production until processing and delivery at the company of the user.

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RAG product specific requirements

General requirements

The substrate must comply with the environmentally hygienic aspects for raw materials and substrates in the applicable country.

Chemical requirements

		Soil improvement	Landscaping
Measurements	Method	Requirement	
EC (mS/m)*	EN 13038	≤ 80	
pH-KCl	EN 10390	4 - 6	
Calcium carbonate (CaCO ₃)	NEN-ISO 10693	< 1 (weight percent)	
Cl (mg/l substrate)	EN 13652	≤ 300	

The most important nutrient elements are determined. Each element is assessed and stated, according to the table.

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			Soil improvement	Landscaping	
Assessment	Phosphate (P-Al)	Phosphate P-total	Potassium (CAT)	Magnesium (CAT)	Nitrogen N-total
Method	EN 1189	NEN 5768	EN 13651	EN 13651	EN 13654
	mg /100g d.m.	g/kg d.m.	mg /liter substrate	mg /liter substrate	mg /kg d.m.
Low	< 30	Spec	< 120	< 120	< 80
Good	30 - 60	Spec	120 - 300	120 - 360	80 - 160
High	> 60	Spec	300 - 475	> 360	> 160

Physical requirements

On the basis of the physical properties the soil improvement/garden soil has to be classified in one of the categories in the table below.

		Soil improvement	Landscaping			
Recipe:	Method	Standard mixture	Peat mixture	Sand mixture	Clay mixture	
Organic matter	EN 13039	20% - 40%	30% - 55%	20% - 40%	20% - 40%	
Granular (% of the mineral parts)						
0 - 2 µm	NEN 5753	6% - 18%	6% - 18%	< 10%	12% - 30%	
< 50 µm		< 40%	<40%	<40%	<40%	
Bulk density (kg/m³)	NEN-EN 13040	500 - 1000	400 - 900	500 - 1000	500 - 1000	
Dry matter (weight %)	NEN-EN 13040	≥ 55	≥ 55	≥ 65	≥ 55	
Shrink percentage	RHP	< 45	< 45	< 45	< 45	

Phytosanitary requirements

		Soil improvement	Landscaping
Type of weeds	Method	Requirements	
Weed score	RHP	< 75 per m ²	