

Compost covers

# COMPOSTcover

Fleece and membrane





## **COMPOST**cover

### Successful protection from rain and sun!

Complicated chemical, physical and biological processes take place in a composting process. A requirement for the ideal process is setting and maintaining the optimal level of moisture in the rotting body. To ensure that rain, ambient temperature, wind or sun have as little influence as possible on the process, windrows should be covered as required. This not only prevents the windrows from becoming wet or drying out, but also prevents the formation of leachate water and reduces the development of odours.



There are several ways to cover windrows. The most expensive, but also the most durable option is a solid roof. Alternatively, the compost windrows can be covered with a textile. In this case, the cover is placed directly on the material. Here we distinguish between a fleece cover and a membrane cover.

### Fleece

Proven for decades, the compost fleece protects windrows from drying out and external influences such as rain, wind, weed seeds and birds. This UV-stabilized prolypropylene fabric is both water vapor permeable and water-draining. Also, the air permeability is not affected, consequently the windrow continues to be supplied with oxygen, carbon dioxide can escape and the chimney effect in the windrow is maintained.





## Membrane

Alternatively, it is possible to cover the rotting body with a semi-permeable membrane. Membranes, in contrast to fleece, drain the water on the surface. Suitable for composting are three-layer laminates consisting of an inner membrane embedded between two supporting layers for mechanical stabilization.

The most important property of a membrane is its odour-filtering effect. Due to its physical properties, a compost protection fleece only has this effect when wet. In fact, a suitable membrane can reduce odour by up to 95 % when used correctly. The requirement is always the use of active aeration. Membrane composting without aeration is technically not possible because the natural respiration capacity of the windrow is not sufficient, the oxygen in the windrow is consumed in a very short time and the process turns anaerobic. This would further accelerate the formation of odourous substances.

Membrane composting only works with a slight overpressure, so it is important that damage such as holes or tears are avoided or repaired quickly to avoid unnecessary odour emissions. Membranes are air permeable but waterproof. It is important to realize that it is not the membrane itself that filters odours, but the film of condensation that forms on the underside of the laminate.





## Fleece KSV 200

#### Technical data

Weight:	200 g/m <sup>2</sup>	
Bursting strength:	625 N/50 mm	
Resistance to static puncture:	2.000 N	
Material:	UV stabilized polypropylene fiber, non-biodegradable, recyclable	
Dimensions (W x L):	3, 4, 5 or 6 x 50 m	

Due to manufacturing tolerances and design changes, the dimensions given may vary slightly. All data subject to change without notice.

#### **Options:**

Other dimensions on request!

# Semi-permeable membrane

#### Technical data

	KSM 430 PP	KSM 500 PTFE	KSM 500 S PTFE
Weight:	430 g/m²	560 g/m²	510 g/m²
Bursting strength:	> 1,250 N/50 mm	> 3,400 N/50 mm	> 5,200 N/50 mm
Air permeability:	> 6.0 m³/m²h at 200 Pa		
Material 1st layer:	Fleece (UV stabilized polypropylene fiber)	Polyester fabric	
Material 2 <sup>nd</sup> layer:	PP membrane	PTFE membrane	
Material 3 <sup>rd</sup> layer:	Fleece (UV stabilized polypropylene fiber)	Polyester fabric	
Width:	6, 9 or 12 m	Project specific!	
Length:	Project specific!		

Due to manufacturing tolerances (weight and bursting strength +/- 5 %, width and length +/- 2 %) and design changes, the dimensions given may vary slightly. All data subject to change without notice.

## Handling and storage

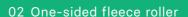
In any case, it is essential that the practitioner thinks about the handling and storage of their compost covers. We offer a wide range of options for removing the covers from the windrows, storing them and putting them back in place.

Dirty, wet, often frozen in winter covers are difficult to move by hand, sometimes impossible. During storage, care must be taken that no vermin can find a home, storage should be as dry as possible and can be done easily and quickly. To facilitate the daily work in practice, we have developed roller devices for tractors, wheel loaders, transfer vehicles or also as self-propelled versions.

With a wheel loader or tractor with front loader, the cover can be rolled up and unrolled via a winding core. The winding core is picked up and put down again by the winding device using a quick adapter. All functions can be operated from the wheel loader or tractor. A winding unit can be mounted on our compost turners in a similar function. As a special solution, we also offer self-propelled solutions for handling covers. For particularly large windrows, we have developed a XXXL-sized winding unit that can wind covers up to 12 m wide using a wheel loader. Changing the winding core in this case is no longer possible for technical reasons.







03 One-sided operation

04 Winding unit with tractor front loader

05 Double-sided operation

06 Winding unit on compost turner

07 Membrane roller XXXL























### Made in Austria – Approved worldwide

As a leader in solutions for biological waste treatment, we have been working on high-performance and economical environmental technology since 1987. Through many years of experience and relevant expertise, we have managed to produce Austrian quality products for efficient, material-friendly compost production. Whether in the gardening, agricultural or purely industrial sector - we provide you with suitable solutions.

Plant components

Compost covers

Machine technology

Container technology

Measurement technology

#### **Compost Systems GmbH**

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