Naue GlacierProtect

|<u>||</u>|Naue

made of Secutex® Green

Snowfarming, glacier and water protection with microplastic-free insulating and reflective nonwoven



Naue GlacierProtect is an insulating and reflective nonwoven made from 100% biodegradable, mechanically bonded nonwoven Secutex® Green, Naue's nonwoven made exclusively from renewable raw materials. Its properties sustainably delay the melting of snow deposits and glacier surfaces. Due to the certified biodegradability under the influence of all relevant environmental conditions, the residues of the product do not harm the environment.

Naue GlacierProtect is UV-resistant. This makes the nonwoven ideal for outdoor use in mountainous regions.

Typical applications for Naue GlacierProtect

Figure 1: Covering snow mounds for protection against solar radiation

Snowfarming

Due to its thickness and high reflectivity, Naue GlacierProtect is very well suited as a top layer in snow farming. This involves storing and covering old snow in snow depots over the summer. With the help of snow farming, skiing operations in mountainous regions are to be secured in the long term by adding stored snow to the basic snowmaking system. Naue GlacierProtect consists of natural raw materials and is therefore naturally very resistant to solar radiation.



Figure 2: Extensive protection of glaciers from melting

Glacier Protection

With Naue GlacierProtect, sensitive glacier areas can be protected from further melting, thus significantly delaying glacier melt. A test in the Austrian Alps showed a reduction in the melting of about 4m in 3 summer months of 2022. Supports of cable cars or ski lifts founded in ice can be protected from excessive solar radiation with Naue GlacierProtect, significantly extending the life of these infrastructure facilities.



Figure 3: Protection of heavily frequented snow surfaces

Protection of entry and exit areas on lifts

Snow areas, which winter sports enthusiasts heavily use, can be protected in an environmentally friendly way with Naue GlacierProtect. These can be, for example, areas near ski huts as well as entry and exit areas at ski lifts. Naue GlacierProtect can be rolled out on the snow. If the nonwoven fabric freezes to the snow, the risk of the cover lifting off due to wind suction is reduced. Any abrasion or residue from Naue GlacierProtect, for example, from fibres freezing in the snow, is converted into natural substances in nature and metabolised by naturally occurring microorganisms.

Advantages of Naue GlacierProtect

- Very high reflection values (80% light, 75% energy)
- High thermal insulation due to the thickness of the product
- Breathable
- Less wind suction due to air permeability and roughness of the surface
- No input of plastic into the environment during installation, operation or deconstruction
- Stable against UV radiation
- Frictional connection by sewing on site
- The yarn to be used is also 100% biodegradable even in nature



The functional life

Due to the low biological activity in glacier protection applications and snow farming, repeated use can be assumed. However, if the degree of pollution is too high and the reflectivity is too strongly impaired, the nonwoven fabric should be replaced with a new one. The already used and therefore stressed nonwoven can be composted, thermally recycled or covered with soil. It is converted 100% into biomass, CO, and water. In all disposal paths, only as much CO, is released as the biomass bound from the environment during its creation (plant growth).

The nonwoven

Due to the industrial production of the fibres and the constant needling process, a consistent and reproducible quality of the nonwoven fabric is achieved. Naue GlacierProtect is available with a mass per unit area of 500g/m² and a width of 4 metres. Other weights per unit area and widths are available on request.

The connection technology

The nonwoven can be sewn on-site with sewing machines suitable for thick nonwovens, also in battery operation. The thread used consists of the same raw material as the fibres and is completely biodegradable. This way, there is no entry of plastics into the sensitive areas of the places of use.

The certificates

SEEDLING Logo

confirms the conformity of the product with Euronorm 13432, "Requirements for the recovery of packaging by composting and biodegradation".



TÜV Austria

The official certificates of TÜV Austria, a neutral and competent certifier, confirm our efforts in the field of sustainability. This is guaranteed by the following certificates:



OK compost INDUSTRIAL guarantees biodegradability in an industrial composting plant.



OK biodegradable SOIL guarantees the complete biodegradability in soil and that there are no negative effects on the environment.



OK biodegradable MARINE guarantees the biological degradation in a natural seawater environment.



OK compost HOME guarantees complete biodegradability under consideration of specific requirements in the garden compost.



OK biodegradable WATER guarantees biological degradation in a natural freshwater environment.

Approvals for the Naue Group



