

biodegradable nonwoven

Made in Germany

The high-tech cleaning wiper VISCO-PAN® is a non-woven wiper that is made entirely from the renewable raw material cotton and is 100% compostable and decomposable. To produce the nonwoven, the raw cotton is first dissolved in a chemical process and the resulting solution is thoroughly cleaned. The loosened cotton is then converted into an endless filament using a spinning process, from which the nonwoven is finally made. This special manufacturing process means that there is no need for any binding agents and a wiper of extremely high purity is obtained. Since it is an endless filament, the particle and fiber emission is lower than with other nonwovens. In addition, the material has a high level of heat resistance and a high discharge capacity for electrostatic charges.

The adjacent SEM image shows the spun endless filaments. In contrast to natural cotton fibers made from raw cellulose, the filaments have a very smooth surface that gives off only a few particles. Their structure is very similar to that of other fully synthetic fibers made of polyester and polyamide. Since the basic material is cellulose, which generally has a very high swelling capacity when it comes into contact with liquids and solvents, large amounts of liquid can be absorbed with the wiper without any problems.

## Characteristics

HiTech wiper made from renewable raw materials, interfolded for use in dispenser boxes

## Features

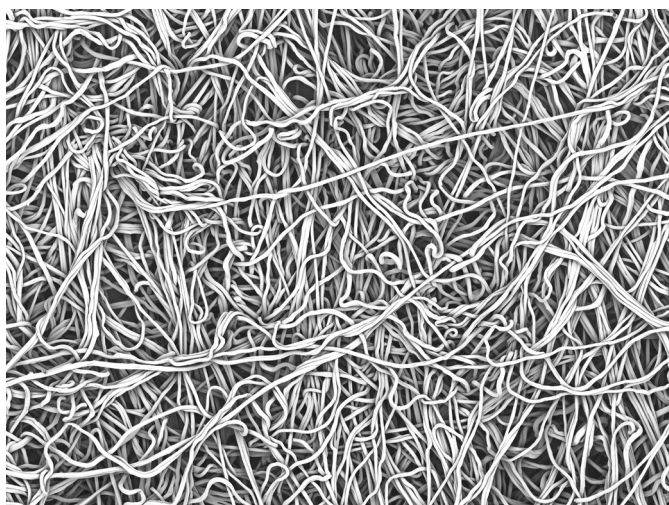
excellent liquid absorption with very high chemical purity

## Application

For all cleaning tasks in less critical areas, no residues when soaking with solvents for cleaning purposes

## General technical specification

|                        |              |
|------------------------|--------------|
| Textile construction   | nonwoven     |
| Mesh / cm <sup>2</sup> | -            |
| Cutting                | mechanically |
| Treatment              | none         |
| Decontaminated         | no           |
| Washable               | no           |
| Sterilisable           | possible     |
| Stat. Quality control  | yes          |



SEM photo Yuko Labuda, image width 3 mm

| <b>General technical data</b>   |  |                        |                     |
|---|--|------------------------|---------------------|
| <b>Mechanical parameters</b>  | <b>Value</b>   | <b>Unit</b>            | <b>After method</b> |
| Thickness   | 0.30   | mm                     | ISO 9073-2          |
| Surface weight  | 60   | g/m <sup>2</sup>       | ISO 9073-1          |
| Break load dry, longitudinal direction                                    | 38   | N                      | ISO 9073-3          |
| Break load dry, lateral direction   | 38   | N                      | ISO 9073-3          |
| Elongation at break, longitudinal direction                               | 32   | mm                     | ISO 9073-3          |
| Elongation at break, lateral direction                                    | 57   | mm                     | ISO 9073-3          |
| <b>Particle release data</b>  | <b>Value</b>   | <b>Unit</b>            | <b>After method</b> |
| Labuda-Cleaning efficacy based on oil film MULTIDRAW KTL N 16             | 88   | %                      | C&C-W-RE            |
| Particle residue (Particle > 0.5 µm) after wiping on surface Rz 5 µm      | 0.78   | k-Part/cm <sup>2</sup> | C&C-W-PF-S          |
| Particle residue (Particle > 0.5 µm) after wiping on surface Rz 39 µm     | 4.05   | k-Part/cm <sup>2</sup> | C&C-W-PF-S          |
| Air particle release (at 40% relH) by Labuda Filling Simulator Mk1        | 2207   | Part 0.5 µm/min        |                     |
| Cleanroom class according to ISO 14644-1                                  | Cleanroom consumables cannot be specified for air purity classes (see VDI 2083 - sheet 9.2). |                        |                     |
| <b>Water absorption (DI water)</b>  | <b>Value</b>   | <b>Unit</b>            | <b>After method</b> |
| Total   | 478  | g/m <sup>2</sup>       |                     |
| Average absorption rate in 5 s  | 0.53   | g                      | C&C-W-AK-R          |
| Average absorption rate in 60 s   | 0.89   | g                      | C&C-W-AK-R          |
| Drop absorption time  | 92.9   | ms                     | C&C-W-EZ            |
| DI-Water after wet wiping   | 7.45   | %                      | C&C-W-RF            |
| <b>Chemical resistance</b>  | <b>Value</b>   | <b>Unit</b>            | <b>After method</b> |
| Charge of break-load (long) after 2.5 min immersion into various solvents |  |                        |                     |
| Dry   | 36.9   | N                      | C&C-W-CF            |
| Water   | 16,7   | %                      | C&C-W-CF            |
| Isopropyl   | 31.5   | %                      | C&C-W-CF            |
| Acetone   | 31.2   | %                      | C&C-W-CF            |

| <b>Triboelectricity</b><br>at 40% relH and room temperature | <b>Value</b> | <b>Unit</b> | <b>After method</b> |
|---|--------------|-------------|---------------------|
| Discharge after 60 s  | > 99         | %           | CC-W-TE             |

**Anion and cation inventory in ppm** measurement with capillary electrophoresis

| Chloride | Fluoride | Nitrate | Nitrite   | Phosphate | Sulphate  |        |           |
|----------|----------|---------|-----------|-----------|-----------|--------|-----------|
| 1.887    | n. n.    | 4.334   | n. n.     | 1.571     | 0.415     |        |           |
| Ammonium | Barium   | Calcium | Potassium | Lithium   | Magnesium | Sodium | Strontium |
| 0.411    | n. n.    | n. n.   | 0.343     | n. n.     | n. n.     | 6.447  | n. n.     |

All data in this sheet are based on measurements taken at the time of their issuance. The publication of this document does not constitute a guarantee for the continued compliance with these data. On request, you will receive current data and tolerance limits from our laboratory. Subject to change without prior notice. Errors and omissions excepted. Clear & Clean is a company certified according to the EN ISO 9001 : 2015 standard. The quality assurance measures are described in our quality manual. When the data contained in this data sheet are changed, no automatic alteration is made. Clean room consumable products cannot be classified according to a clean room class for air purity according to ISO-14644-1.

**Order and packing information / single packs VISCO-PAN®**

| Type  | Dimensions<br>in cm | Folding | Content<br>pcs / pack | Packs per<br>carton | Pieces per<br>carton | Weight per<br>carton in kg | Dimensions p.<br>carton in cm |
|-------|---------------------|---------|-----------------------|---------------------|----------------------|----------------------------|-------------------------------|
| CC545 | 25 x 22             | Inter   | 100                   | 50                  | 5000                 | 24.0                       | 80 x 60 x 45                  |