

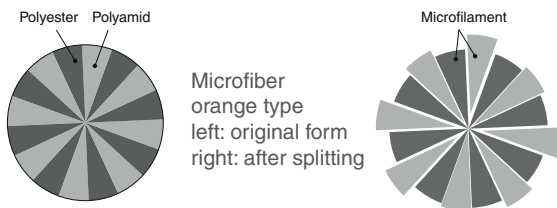
SONIT[®]-MDH



Knit wiper for precision cleaning

Made in Germany

Sonit[®]-MDH is a heavy knitted fabric made of ultra-fine multifilament yarn. It is suitable both for the removal of heavy impurities and for the finest precision cleaning tasks. The slightly textured bicomponent yarn makes the fabric soft and supple, which optimally adapts to the surface during the cleaning process. It is also very absorbent for solvents. The relatively high surface weight gives the cloth a pleasant haptic impression. By means of a multi-stage decontamination process, the particulate and chemical impurities are largely removed from the knitted fabric. Sonit[®]-MDH is the ideal cleaning product for a variety of applications of precision cleaning in the manufacturing environment of clean working.



The structure of this cloth is clearly visible at the adjacent photomicrograph (Zeiss Axioskop V16). Due to the bulky structure and the high number of cavities, a sufficient liquid intake is achieved. Thus, the knitted fabric can also be adapted to uneven surfaces during the wiping process. The large number of fibrils ensures that the Sonit[®]-MDH can remove the highest degree of particulate, greasy and liquid contamination from the surface of the object.

Characteristics

knitware from two-component multifilament yarn

Features

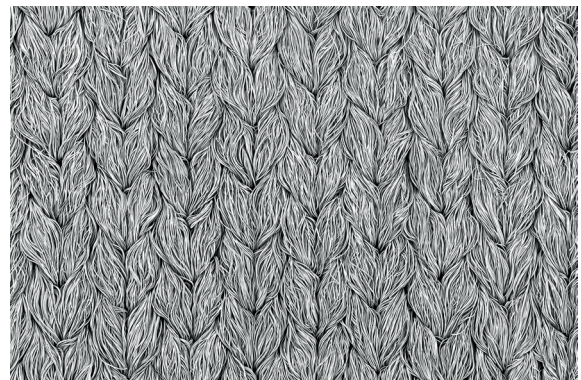
very high cleaning effectiveness (93%), high surface mass (265 g/m²)

Application

precision cleaning of sensitive surfaces

General technical specification

| | | |
|--------------------------|---------------------|--|
| Textile construction | knitware | |
| Mesh / cm ² | 400 | |
| Cutting | laser beam | |
| Possible decontamination | nonionic surfactant | |
| Decontaminated | yes | |
| Washable | not recommended | |
| Sterilisable | possible | |
| Stat. Quality control | yes | |



SEM photo Yuko Labuda, image height 3 mm

General technical data

| Mechanical parameters | Value | Unit | After method |
|---|-------|------------------|--------------|
| Thickness | 0.72 | mm | ISO 9073-2 |
| Surface weight | 265 | g/m ² | ISO 9073-1 |
| Break load dry, longitudinal direction | 775 | N | ISO 9073-3 |
| Break load dry, lateral direction | 375 | N | ISO 9073-3 |
| Elongation at break, longitudinal direction | 84 | mm | ISO 9073-3 |
| Elongation at break, lateral direction | 226 | mm | ISO 9073-3 |

| Particle release data | Value | Unit | After method |
|---|--|------------------------|--------------|
| Labuda-Cleaning efficacy based on oil film MULTIDRAW KTL N 16 | 92.9 | % | C&C-W-RE |
| Particle residue (Particle > 0.5 µm) after wiping on surface Rz 5 µm | 5.4 | k-Part/cm ² | C&C-W-PF-S |
| Particle residue (Particle > 0.5 µm) after wiping on surface Rz 39 µm | 7.7 | k-Part/cm ² | C&C-W-PF-S |
| Air particle release (at 40% relH) by Labuda Fulling Simulator Mk1 | 102 | 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). | | |

| Water absorption (DI water) | Value | Unit | After method |
|---------------------------------|-------|------------------|--------------|
| Total | 555.6 | g/m ² | |
| Average absorption rate in 5 s | 0.5 | g | C&C-W-AK-R |
| Average absorption rate in 60 s | 0.87 | g | C&C-W-AK-R |
| Drop absorption time | 734 | ms | C&C-W-EZ |
| DI-Water after wet wiping | 5 | % | C&C-W-RF |

| Chemical resistance | Value | Unit | After method |
|---|-------|------|--------------|
| Charge of break-load (long) after 2.5 min immersion into various solvents | | | |
| Dry | 775 | N | C&C-W-CF |
| Water | -4 | % | C&C-W-CF |
| Isopropyl | -3 | % | C&C-W-CF |
| Acetone | -6 | % | C&C-W-CF |

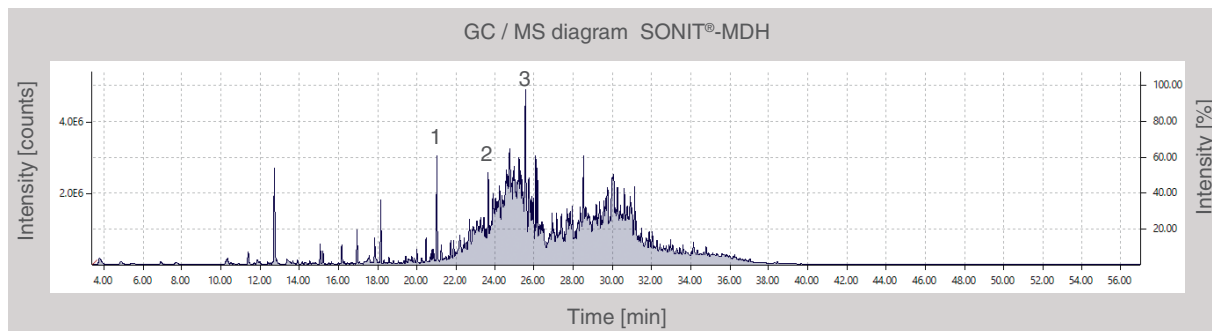
| Triboelectricity at 40% relH and room temperature | Value | Unit | After method |
|---|--------------|-------------|---------------------|
| Discharge after 60 s | 9.6 | % | CC-W-TE |

Anion and cation inventory in ppm measurement with capillary electrophoresis

| Chloride | Fluoride | Nitrate | Nitrite | Phosphate | Sulphate | | |
|----------|----------|---------|-----------|-----------|-----------|--------|-----------|
| 0.1 | 1.011 | 0.114 | 0.084 | 0.118 | 0.045 | | |
| Ammonium | Barium | Calcium | Potassium | Lithium | Magnesium | Sodium | Strontium |
| 0.311 | - | 1.135 | 0.094 | - | 0.073 | 0.102 | - |

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.

SONIT® is a registered European Union trademark (No. 018305462) of Clear & Clean Werk für Reintechnik GmbH in Lübeck.



Outgassing at 90 ° C 1: tridecane 2: isodecyl alcohol 3: dodecanol

Order and packing information / single packs SONIT®-MDH

| Type | Dimensions in cm | Folding | Content pcs / pack | Packs per carton | Pieces per carton | Weight per carton in kg | Dimensions p. carton in cm |
|-------|---------------------|-----------|-----------------------|---------------------|----------------------|----------------------------|-------------------------------|
| CC195 | 10 x 10 | bulk pack | 200 | 18 | 3600 | 9.5 | 48 x 29 x 29 |
| CC197 | 40 x 40 | flat pack | 50 | 10 | 500 | 22 | 58 x 40 x 35 |
| CC198 | 20 x 20 | flat pack | 50 | 30 | 1500 | 17.6 | 58 x 40 x 35 |

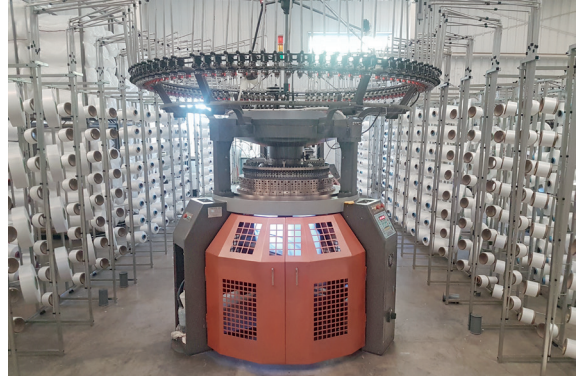
Order and packing information / special formats SONIT®-MDH

| Type | Dimensions in cm | Folding | Content pcs / pack | Packs per carton | Pieces per carton | Weight per carton in kg | Dimensions p. carton in cm |
|----------|---------------------|---------|-----------------------|---------------------|----------------------|----------------------------|-------------------------------|
| CC194D10 | round Ø 10 | | 50 | | | | |
| CC194D6 | round Ø 6 | | 50 | | | | |

From yarn to hi-tech cleaning wipers



knitted multifilament yarn as roll goods



an industrial knitting machine



our laser formatting for knit wipers



Example: our aquatic decontamination



our visual inspection and packaging in the ISO 5 clean room



Example: cleaning optical components