

Cleanroom paper

Made in Germany

Cleanroom Paper must have a number of characteristics which are not practical or useful for standard papers. In particular, during handling it must only release a minimal number of particles. The fulfilment of this requirement prohibits the use of additives in paper production, which could easily be released when such paper is used. The dust on the cutting edges arising from cutting the cleanroom paper to format must be carefully removed. Cleanroom paper should be abrasion resistant, copyable, writable, printable and also sterilisable for use in the Pharma Industry. The paper should be tear and rip resistant so that limited numbers of particles are released during handling and there is no damage to the edges due to ripping. For the Semiconductor Industry it is important that cleanroom paper must only release minimal amounts of ionic contamination, because this can pose a risk for the semiconductor manufacturing process. Galaxy® cleanroom paper is used by the European Semiconductor-Industry since the early 90s.

Characteristics

cleanroom paper with polymer coating, DIN format packs of 500 sheets

Features

low particle release, low ionic content

Application

As medium for documentation purposes in cleanrooms and laboratories of the semiconductor and pharmaceutical industry

General technical specification

| | | |
|-----------------------|----------------------|--|
| Construction | Paper | |
| Cutting | mechanically | |
| Coating | Polymer | |
| Laser printer | well suited | |
| Ink jet printer | exceeded drying time | |
| Sterilisable | Possible | |
| Stat. Quality control | yes | |

Our SEM image on the right shows clearly, that our GALAXY® cleanroom paper has a high surface density, which ensures optimal surface purity due to the sealing with particle-binding polymers. Moreover, we offer our cleanroom paper with the following additional options: e.g. printed, with a 2 mm marking on both left and right margins in red, with standard multiple holes or, if specified, with holes and markings on both margins. We will also cut the paper to special formats up to a maximum of 106 x 60 cm.



SEM photo Yuko Labuda, image width 3 mm

General technical data

| Paper-construction | Value | Unit | After method |
|-------------------------|-------|------------------|--------------|
| Thickness | 0.103 | mm | ISO 9073-2 |
| Mass per surface unit | 84.8 | g/m ² | ISO 9073-1 |
| Tensile strength long | 222.3 | N | ISO 9073-3 |
| Tensile strength lat | 112.2 | N | ISO 9073-3 |
| Micro roughness RZ long | 15.2 | µm | ISO 9073-3 |
| Micro roughness RZ lat | 14.3 | µm | ISO 9073-3 |

Other parameters

| | Value | Unit | After method |
|----------------------|-------|------|--------------|
| Triboelectric charge | 1.8 | kV | CC-W-TE |
| decay time | 1.24 | s | CC-W-TE |

Anion and cation inventory in ppm measurement with capillary electrophoresis

| | | | | | | | |
|----------|----------|---------|-----------|-----------|-----------|--------|-----------|
| Chloride | Fluoride | Nitrate | Nitrite | Phosphate | Sulphate | | |
| 0.76 | 0.084 | 0.514 | - | 0.078 | 0.887 | | |
| Ammonium | Barium | Calcium | Potassium | Lithium | Magnesium | Sodium | Strontium |
| 0.072 | - | - | 0.103 | - | - | 2.805 | - |

Classes GALAXY®-Cleanroom-Paper is available in 2 different classes

| Classes | Dekontamination of the edges | Paper surface with polymer-sealing | Extra-low ion-content |
|----------------|------------------------------|------------------------------------|-----------------------|
| Dekontaminated | x | x | x |
| Standard | - | x | x |

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 GALAXY®

| Type | Surface weight in g/m ² | Standard format size | Dimensions pack in cm | Packs per carton | Sheets per carton | Weight per carton in kg | Dimensions p. carton in cm |
|--------|------------------------------------|----------------------|-----------------------|------------------|-------------------|-------------------------|----------------------------|
| CC118D | 80 | A3 | 42 x 30 x 4.8 | 2 | 1000 | 10.5 | 45 x 33 x 12 |
| CC115D | 80 | A4 | 30 x 21 x 4.8 | 5 | 2500 | 13.5 | 31 x 23 x 24 |
| CC117D | 80 | A5 | 21 x 15 x 4.8 | 10 | 5000 | 13.5 | 31 x 23 x 24 |
| CC118S | 80 | A3 | 42 x 30 x 4.8 | 2 | 1000 | 10.5 | 45 x 33 x 12 |
| CC115S | 80 | A4 | 30 x 21 x 4.8 | 5 | 2500 | 13.5 | 31 x 23 x 24 |
| CC117S | 80 | A5 | 21 x 15 x 4.8 | 10 | 5000 | 13.5 | 31 x 23 x 24 |

Order and packing information / slip of paper, pocketblocks, collegeblocks and separators GALAXY®

| Type | Product | Size | Surface weight in g/m ² | Pieces per pack | Dimensions of pack in cm | Weight per pack in kg |
|-----------|--------------|--------------|------------------------------------|-----------------|--------------------------|-----------------------|
| CC110 | Pocketblock | A7, 50 pages | 80 | 12 | 18 x 15 x 5 | 0.65 |
| CC112 | Collegeblock | A4, 50 pages | 80 | 4 | 35 x 26 x 3.5 | 1.7 |
| CC114 | Collegeblock | A5, 50 pages | 80 | 4 | 22 x 18 x 4 | 0.74 |
| CC113S-15 | Separators | ∅ 15 cm | 80 | 2000 | 34 x 23 x 11 | 3.3 |