



# **Product description**

SEFAR® PA polyamide screen printing mesh is suitable for applications where highly abrasive inks are used and wherever the stencil has to fit to a shaped substrate. Typical applications, for example, containers that are subject to small dimensional changes between the individual pieces. This can be compensated when using SEFAR® PA due to its elasticity. SEFAR® PA therefore suits very well for tiles and other printing substrates having rough surfaces.

| Mesh number   | Mesh count<br>[/cm] | Mesh count<br>[/inch] – | Thread diameter nominal [µm] | Weave | Tolerance of mesh count<br>[± n/cm] | Mesh opening<br>[µm] | Open area<br>[%] | Mesh thickness (woven)<br>[µm] | Tolerance of mesh thickness [± µm] | Theoretical ink volume<br>[cm³/ m²] |                |                  | able mesh widths<br>ance -0 / +4) [cm]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
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|               |                     |                         |                              |       |                                     |                      |                  |                                |                                    |                                     | 115            | 158              | The state of the s |
| 200/510-30 TW | 200                 | 510                     | 30                           | 2:2   | 5                                   | 18                   | 13               | 57                             | 5                                  | 7                                   | ▼•             | •                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 180/460-30 TW | 180                 | 460                     | 30                           | 2:2   | 4.5                                 | 24                   | 19               | 60                             | 3                                  | 11                                  | $\nabla ullet$ | $\nabla$ 0       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 165/420-35 TW | 165                 | 420                     | 35                           | 2:2   | 4                                   | 24                   | 16               | 64                             | 3                                  | 10                                  | 0              |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 165/420-30 PW | 165                 | 420                     | 30                           | 1:1   | 4                                   | 28                   | 21               | 47                             | 3                                  | 10                                  | ▼•             |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 150/380-30 PW | 150                 | 380                     | 30                           | 1:1   | 4                                   | 36                   | 29               | 50                             | 3                                  | 15                                  | ▼•             |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 140/355-35 PW | 140                 | 355                     | 35                           | 1:1   | 3.5                                 | 34                   | 23               | 56                             | 3                                  | 13                                  | *•             | $\nabla \bullet$ |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 140/355-30 PW | 140                 | 355                     | 30                           | 1:1   | 3.5                                 | 40                   | 31               | 47                             | 3                                  | 15                                  | <b>v</b> •     |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 130/330-35 PW | 130                 | 330                     | 35                           | 1:1   | 3.5                                 | 41                   | 28               | 56                             | 3                                  | 16                                  | $\nabla$       |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 120/305-35 PW | 120                 | 305                     | 35                           | 1:1   | 3                                   | 47                   | 37               | 57                             | 3                                  | 18                                  | ▼•             | ∇●               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 120/305-30 PW | 120                 | 305                     | 30                           | 1:1   | 3                                   | 51                   | 37               | 49                             | 3                                  | 18                                  | $\nabla$ 0     | $\nabla$         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 100/155-38 PW | 100                 | 255                     | 38                           | 1:1   | 2.5                                 | 61                   | 37               | 66                             | 3                                  | 25                                  | <b>VO</b>      | 0                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 90/230-44 PW  | 90                  | 230                     | 44                           | 1:1   | 2.5                                 | 66                   | 35               | 74                             | 4                                  | 26                                  | •              | 0                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 77/195-50 PW  | 77                  | 195                     | 50                           | 1:1   | 2                                   | 82                   | 40               | 82                             | 4                                  | 33                                  | 0              | •                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 61/156-60 PW  | 61                  | 156                     | 60                           | 1:1   | 1.5                                 | 103                  | 39               | 100                            | 5                                  | 39                                  | •              | •                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 54/137-60 PW  | 54                  | 137                     | 60                           | 1:1   | 1.5                                 | 125                  | 46               | 103                            | 5                                  | 47                                  |                | •                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 48/123-70 PW  | 48                  | 123                     | 70                           | 1:1   | 1                                   | 136                  | 43               | 128                            | 6                                  | 55                                  |                | 0                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 40/103-80 PW  | 40                  | 103                     | 80                           | 1:1   | 1                                   | 171                  | 47               | 142                            | 8                                  | 66                                  | •              | 0                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 36/92-90 PW   | 36                  | 92                      | 90                           | 1:1   | 1                                   | 190                  | 47               | 158                            | 8                                  | 74                                  |                | •                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 24/60-160 PW  | 24                  | 60                      | 160                          | 1:1   | 1.                                  | 252                  | 37               | 287                            | 16                                 | 105                                 |                | •                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 12/30-300 PW  | 12                  | 30                      | 300                          | 1:1   | 1                                   | 521                  | 39               | 525                            | . 26                               | 205                                 | •              |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 10/25-350 PW  | 10                  | 25                      | 350                          | 1:1   | 1                                   | 640                  | 41               | 610                            | 31                                 | 250                                 |                | •                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

## **Roll lenaths**

|                          | Roll length including tolerance |  |  |  |  |  |  |
|--------------------------|---------------------------------|--|--|--|--|--|--|
| 4AE077055P158Y0 <b>E</b> | 30 m +/-3 m                     |  |  |  |  |  |  |
| 4AE077055P158Y0 <b>G</b> | 50 m +/-5 m                     |  |  |  |  |  |  |
| 4AE077055P158Y0 <b>L</b> | 15 m +11,9 m/-10 m              |  |  |  |  |  |  |





## **Definitions**

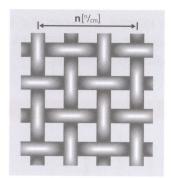
90/230-44 W PW 90/230-44 W PW 90/230-44 W PW 90/230-44 W PW 90/230-44 W PW

## Mesh number

Mesh count 1/cm Thread-Ø d<sub>nom</sub> Mesh color Type of weave

90/230-44 W PW Mesh count Vinch 90/230-44 W PW 90/230-44 W PW 90/230-44 **W** PW 90/230-44 W PW

(white = W, yellow = Y)



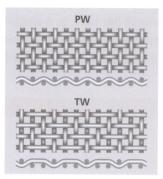
## Mesh count n [1/cm]

The mesh count **n** stands for the number of threads per cm or inch. The tolerance is the defined range of the statistically ascertained mean values of mesh counts.



## Thread diameter nominal

 $d_{nom} [\mu m]$ The diameter  $d_{nom}$  is measured on the thread before weaving.



### Weave

The type of weave is either PW (plain weave 1:1) or **TW** (twill weave 2:1, 2:2)



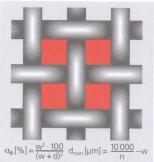
# Mesh opening w [µm]

The mesh opening  $\mathbf{w}$  is the distance between two adjacent warp or weft threads.

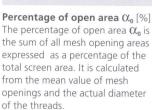


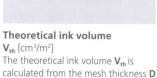
# Mesh thickness D [µm]

The mesh thickness **D** is measured according to ISO 5084. The tolerance is the defined range of the statistically ascertained mean values of mesh thickness.



The theoretical ink volume V<sub>th</sub> is calculated from the mesh thickness D and the percentage of open area  $\alpha_0$ .





 $V_{th} [cm^3/m^2] = \frac{\alpha_0 \cdot D}{100}$ 

The abrevations correspond with DIN Norm 16 611. All values correspond to unstretched mesh.

The product data stated here and our advice on application technology, in verbal and written form and on the basis of tests and experiments, are provided to the best of our knowledge and belief; however, this information must be regarded as non-binding. It is based on our current knowledge and experience, and on standardized process and test conditions as per DIN standards 16610 / 16611 / 53804 and ISO 13934-1 / 5084. As many variations may occur due to each specific application, we are unable to provide an overall assessment regarding the range of fluctuations for processes and follow-up processes (i.e. parameters, interactions with materials and machines used, and chemical reactions). For this reason, the parameters we recommend should be understood merely as values for guidance purposes. All the illustrations, descriptions, data, diagrams and tables, etc., shown here may change without prior notice, and they do not represent the contractually agreed characteristics of the product. It is impossible for us to have control over the post-processing of our products, so the user is solely responsible in this regard.

Our products are sold and distributed in accordance with the latest version of our General Terms and Conditions of Sale and Delivery.







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