



# nyloflex® ART nyloflex® ART Digital

The perfect printing plate for printing on fiber based packaging material

## Product features

- ideal to print on all kind of fibre surfaces
  - preprint on kraft, test and uncoated liners
  - high quality postprint on corrugated board
  - folding cartons
- suitable for printing on folding corrugated board, especially on fine flute
- high solid density and defined line work on all paper substrates
- wide exposure latitude and open intermediate depths offer process stability and repeatability
- very good reproduction of highlight dots
- excellent and consistent ink transfer especially with water based inks
- suitable for alcohol based inks, conditionally suitable for UV inks\*

\* Standard thicknesses currently available – subject to change.

## Advantages of nyloflex® Digital

- superior printing quality with sharper images, more open intermediate depths, finer highlight dots and less dot gain, i.e. larger range of tonal values therefore improved contrast
- increased productivity and data transfer without loss of quality due to digital workflow
- consistency in quality when repeating plate processing
- cost effective and more environmentally friendly in processing, as no film is required

# nyloflex® ART | nyloflex® ART Digital

|                                                          | nyloflex® ART              |                            | nyloflex® ART Digital       |                            |                            |                            |                            |
|----------------------------------------------------------|----------------------------|----------------------------|-----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
|                                                          | 170                        | 284                        | 114                         | 170                        | 254                        | 284                        | 394                        |
| <b>Technical characteristics</b>                         |                            |                            |                             |                            |                            |                            |                            |
| <b>Base material</b>                                     | polyester film             |                            | polyester film              |                            |                            |                            |                            |
| <b>Colour of raw plate</b>                               | red                        |                            | red , with black LAMS layer |                            |                            |                            | orange                     |
| <b>Total thickness* (mm)</b><br>(inch)                   | <b>1.70</b><br>(0.067")    | <b>2.84</b><br>(0.112")    | <b>1.14</b><br>(0.045")     | <b>1.70</b><br>(0.067")    | <b>2.54</b><br>(0.100")    | <b>2.84</b><br>(0.112")    | <b>3.94</b><br>(0.155")    |
| <b>Hardness acc. to DIN 53505 (Shore A)</b>              | <b>40</b>                  | <b>40</b>                  | <b>40</b>                   | <b>40</b>                  | <b>40</b>                  | <b>40</b>                  | <b>40</b>                  |
| <b>Plate hardness (Shore A)</b>                          | <b>60</b>                  | <b>47</b>                  | <b>73</b>                   | <b>60</b>                  | <b>51</b>                  | <b>47</b>                  | <b>40</b>                  |
| <b>Relief depth (mm)</b>                                 | <b>0.7 – 0.9</b>           | <b>0.9 – 1.2</b>           | <b>0.6 – 0.7</b>            | <b>0.7 – 0.9</b>           | <b>0.9 – 1.2</b>           | <b>0.9 – 1.2</b>           | <b>1.0 – 1.5</b>           |
| <b>Tonal range (%)</b><br><b>at screen ruling (l/cm)</b> | <b>2 – 95</b><br><b>60</b> | <b>2 – 95</b><br><b>60</b> | <b>1 – 98</b><br><b>60</b>  | <b>1 – 98</b><br><b>60</b> | <b>2 – 98</b><br><b>60</b> | <b>2 – 98</b><br><b>60</b> | <b>3 – 90</b><br><b>48</b> |
| <b>Fine line width (down to µm)</b>                      | <b>100</b>                 | <b>100</b>                 | <b>100</b>                  | <b>100</b>                 | <b>100</b>                 | <b>100</b>                 | <b>300</b>                 |
| <b>Isolated dot diameter (down to µm)</b>                | <b>200</b>                 | <b>200</b>                 | <b>200</b>                  | <b>200</b>                 | <b>200</b>                 | <b>200</b>                 | <b>750</b>                 |

| <b>Processing parameters**</b>           |                  |                  |                  |                  |                  |                  |                  |
|------------------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| <b>Back exposure (s)</b>                 | <b>20 – 40</b>   | <b>80 – 120</b>  | <b>15 – 30</b>   | <b>20 – 40</b>   | <b>40 – 60</b>   | <b>80 – 120</b>  | <b>50 – 100</b>  |
| <b>Main exposure (min)</b>               | <b>8 – 20</b>    | <b>8 – 20</b>    | <b>8 – 12</b>    | <b>8 – 12</b>    | <b>8 – 12</b>    | <b>8 – 12</b>    | <b>10 – 14</b>   |
| <b>Washout speed (mm/min)</b>            | <b>130 – 190</b> | <b>110 – 170</b> | <b>130 – 190</b> | <b>130 – 190</b> | <b>110 – 170</b> | <b>110 – 170</b> | <b>70 – 110</b>  |
| <b>Drying time at 60 °C / 140 °F (h)</b> | <b>2.0 – 2.5</b> | <b>2.0 – 3.0</b> | <b>1.5 – 2.0</b> | <b>2.0 – 2.5</b> | <b>2.0 – 3.0</b> | <b>2.0 – 3.0</b> | <b>2.0 – 3.0</b> |
| <b>Post exposure UV-A (min)</b>          | <b>10</b>        | <b>10</b>        | <b>10</b>        | <b>10</b>        | <b>10</b>        | <b>10</b>        | <b>10</b>        |
| <b>Light finishing UV-C (min)</b>        | <b>7 – 12</b>    | <b>7 – 12</b>    | <b>7 – 12</b>    | <b>7 – 12</b>    | <b>7 – 12</b>    | <b>7 – 12</b>    | <b>7 – 12</b>    |

\* Standard thicknesses currently available – subject to change.

\*\* All processing parameters depend on, among others, the processing equipment, lamp age and the type of washout solvent. The above mentioned processing times were established under optimum conditions on nyloflex® processing equipment and using nylosolv® washout solvents. The values for the main exposure of digital plates were determined at an exposure intensity of > 15mW/cm². Under other conditions the processing times can differ from these. Therefore the above mentioned values are only to be used as a guide.

## Suitable equipment

The nyloflex® ART can be processed with nyloflex® processing equipment and all similar devices. The nyloflex® ART Digital can be used with all laser systems suitable for imaging flexo printing plates.

## Printing inks

Suitable for all water based and alcohol based printing inks and conditionally suitable for UV inks.

(ethyl acetate content preferably below 15%, ketone content preferably below 5%)

## Washout solvents

Especially good results are achieved with nylosolv® washout solvents.

nylosolv® can be distilled and reused.

## Processing information

A detailed description of the individual platemaking steps, as well as detailed information about processing and storing can be found in the nyloflex® User Guide.

## High quality standard

nyloflex® printing plates are manufactured in accordance to the requirements and standards of DIN ISO 9001. This process guarantees our customers a consistent high quality of the products and services.

**You are welcome to contact us for further information.**

**Flint Group Flexographic Products**  
Sieglestrasse 25  
70469 Stuttgart  
Germany

T +49 711 9816-301  
F +49 711 9816-801  
info.flexo@flintgrp.com  
www.flintgrp.com

All information in this document is based on our present knowledge and experience at the time of printing. Due to the multitude of factors influencing the processing and application of our products, it does not exempt the user from testing and calibrating. Nor does it imply any legally binding assurance concerning specific properties of the products or the suitability for a particular application. The responsibility of observing any possible industrial property rights, laws and regulations is the obligation of the user. Subject to technical changes without prior notice. Names marked ® are registered trademarks of Flint Group.