

## PREMIUMmax

### Product Information

9-layer high barrier shrink bags and tubing in 95 $\mu$  for packaging food products with sharp edges - to be used for "high abuse" applications

### Properties

- excellent gas and water vapor barrier to extend shelf life of the product
- very high shrink for optical advantages and perfect presentation of the product
- excellent transparency and gloss due to PET outer layer
- extraordinary puncture resistance, due to several layers of PA
- UV barrier
- great sealing properties, also on contaminated surfaces (blood, oil)
- EVOH barrier (PVDC-, chlorine free product)
- possibility of overlapped sealing for easy handling of the bag

All PREMIUMPACK products correspond with GMP VO (EU) No 2023/2006, EU Regulation No 1935/2004, and No 10/2011. Our production is certified to BRC-IoP and HACCP.

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## Technical data

|                                                              | Standard      | Unit                                     | Value                                |
|--------------------------------------------------------------|---------------|------------------------------------------|--------------------------------------|
| <b>Barrier properties</b>                                    |               |                                          |                                      |
| Oxygen transmission                                          | 23°C, 50%RH   | cm <sup>3</sup> /m <sup>2</sup> .24h     | 0.7                                  |
| CO <sub>2</sub> transmission                                 | 23°C, 0%RH    | cm <sup>3</sup> /m <sup>2</sup> .24h.atm | 3.5                                  |
| Water vapor transmission                                     | 40°C, 90%RH   | g/m <sup>2</sup> .24h                    | 7                                    |
| UV Barrier                                                   | 250nm         | %                                        | 2                                    |
| <b>Product data</b>                                          |               |                                          |                                      |
| Thickness                                                    |               | µm                                       | ≥95                                  |
| Shrinkage                                                    | 90°C / 2 sec  | MD%, TD %                                | ≥30                                  |
| Weight per m <sup>2</sup>                                    |               | gram                                     | 186                                  |
| <b>Mechanical properties</b>                                 |               |                                          |                                      |
| Puncture resistance                                          | ASTM F1306    | N                                        | 127                                  |
| Elongation at break                                          | ASTM F1306    | %                                        | 153                                  |
| Distance to break                                            | ASTM F1306    | mm                                       | 14                                   |
| Energy to break                                              | ASTM F1306    | mJ                                       | 682                                  |
| Modul                                                        | ASTM F1306    | N/mm <sup>2</sup>                        | 931                                  |
| <b>Optical properties</b>                                    |               |                                          |                                      |
| Haze                                                         | ASTM D1003-97 | %                                        | 16.2                                 |
| <b>Recommended conditions (depending on type of machine)</b> |               |                                          |                                      |
| Sealing time                                                 | PREMIUMPACK   | s                                        | Min. 2                               |
| Shrink condition – time                                      | PREMIUMPACK   | s                                        | 1-2                                  |
| Shrink condition – temperature                               | PREMIUMPACK   | °C                                       | 90-95                                |
| <b>Storage conditions</b>                                    |               |                                          |                                      |
| Time                                                         | PREMIUMPACK   |                                          | 2 years after production             |
| Condition                                                    | PREMIUMPACK   |                                          | ≤ 23°C, ≤ 60% RH, original packaging |