



## Anti Fog Cross-Linked Shrink Film

JT04 is an ideal overwrap for frozen foods. The main advantage of this film is that it won't fog up or promote water condensation under ambient temperature, which can help you see packed items clearly. Since it is cross-linked, JT04 has all good properties of JT03 and is compatible with all packing machinery.

Available thickness: 12micron, 15micron, 19micron and 25 micron.

| TEST ITEM                     | UNIT                                   | ASTM TEST | TYPICAL VALUES |      |           |      |
|-------------------------------|--|-----------|----------------|------|-----------|------|
| THICKNESS                     |  |           | 12um           | 15um | 19um      | 25um |
| <b>TENSILE</b>                |  |           |                |      |           |      |
| Tensile Strength (MD)         | N/mm <sup>2</sup>                      | D882      | 121            | 126  | 131       | 131  |
| Tensile Strength (TD)         |  |           | 111            | 116  | 121       | 126  |
| Elongation (MD)               | %                                      |           | 121            | 126  | 131       | 136  |
| Elongation (TD)               |  |           | 111            | 116  | 121       | 126  |
| <b>TEAR</b>                   |  |           |                |      |           |      |
| MD                            | g                                      | D1922     | 11.1           | 13.1 | 16.6      | 24.1 |
| TD                            |  |           | 10.1           | 11.6 | 15.1      | 22.6 |
| <b>SEAL STRENGTH</b>          |  |           |                |      |           |      |
| MD/Hot Wire Seal              | N/mm                                   | F88       | 1.2            | 1.43 | 1.8       | 2.35 |
| TD/Hot Wire Seal              |  |           | 1.1            | 1.33 | 1.7       | 2.15 |
| <b>COF(film to Film)</b>      |  |           |                |      |           |      |
| Dynamic                       |  | D1894     | 0.41           | 0.39 | 0.37      | 0.36 |
| Static                        |  |           | 0.42           | 0.4  | 0.38      | 0.37 |
| <b>OPTICS</b>                 |  |           |                |      |           |      |
| Haze                          |  | D1003     | 3.9            | 4.9  | 5.6       | 5.9  |
| Clarity                       |  | D1746     | 95.6           | 94.6 | 93.6      | 91.1 |
| Gloss @ 45Deg                 |  | D2457     | 82.1           | 80.1 | 78.6      | 76.1 |
| Antifog arrival time at 5°C   | 2 Hours                                |           |                |      |           |      |
| Antifog Effect                | Complete transparent, no visible water |           |                |      |           |      |
| <b>BARRIER</b>                |  |           |                |      |           |      |
| Oxygen Transmission Rate      | cc/m <sup>2</sup> /day                 | D3985     | 9600           | 8700 | 6200      | 4900 |
| Water Vapor Transmission Rate | gm/m <sup>2</sup> /day                 | F1249     | 30.8           | 27.4 | 19.6      | 16.6 |
| <b>SHRINKAGE PROPERTIES</b>   |  |           |                |      |           |      |
|                               |  |           | <b>MD</b>      |      | <b>TD</b> |      |
| Free Shrinkage                | 100°C                                  | %         | D2732          | 21   | 31        |      |
|                               | 110°C                                  |           |                | 31   | 46        |      |
|                               | 120°C                                  |           |                | 63   | 65        |      |
|                               | 130°C                                  |           |                | 82   | 79        |      |
| Shrink Tension                | 100°C                                  | Mpa       | D2838          | 2.25 | 2.6       |      |
|                               | 110°C                                  |           |                | 2.9  | 4         |      |
|                               | 120°C                                  |           |                | 3.4  | 4.25      |      |
|                               | 130°C                                  |           |                | 3.41 | 3.95      |      |

Note: This information represents our best judgment on the work done, but the company assumes no liability whatsoever in connection with the use of information or findings contained herein.