

## Biaxially Oriented Polyamide Film with Straight-cut Property

General Property of “ EMBLEM™ NCBC-15 ”

Effective Date : 30th November 2022

| Properties                       |   | Test Method                             | Units | Measurement Value |
|----------------------------------|---|---|-------|-------------------|
| Thickness                        |   | ISO 4593                                | μm    | 15                |
| Tensile Strength                 | MD  | ISO 527-3                               | MPa   | 230               |
|                                  | TD  |   |       | 235               |
| Elongation                       | MD  | ISO 527-3                               | %     | 125               |
|                                  | TD  |   |       | 110               |
| Tensile Modulus                  | MD  | ISO 527-3                               | GPa   | 2.8               |
|                                  | TD  |   |       | 2.5               |
| Tear Propagation Resistance      | MD  | ISO 6383-1                              | mN    | 35                |
|                                  | TD  |   |       | 35                |
| Pinhole Resistance (Piercing)    |   | UNITIKA Method<br>Radius 0.5mm          | N     | 8.5               |
| Heat Shrinkage                   | MD  | UNITIKA Method<br>Dry Air 160°C-5min.   | %     | 1.6               |
|                                  | TD  |   |       | 0.6               |
|                                  | MD  | UNITIKA Method<br>Hot Water 100°C-5min. | %     | 3.0               |
|                                  | TD  |   |       | 2.1               |
| Haze                             |   | ISO 14782                               | %     | 5.0               |
| Gloss                            |   | IOS 2813                                | %     | 150               |
| Coefficient of Friction, Kinetic | Corona Side (Outside)<br>/ Corona Side(Outside) | ISO 8295                                | —     | 0.65              |
|                                  | Corona side (Inside)<br>Corona Side (Outside)   | ISO 8296                                | mN/m  | 50                |

Test condition is 23°C-50%RH unless described in Test Method.

Described data is for information only and no guarantee of all products property.