

# FORMEX® N1J PRODUCT DATA

## FLAME RETARDANT POLYCARBONATE SHEET

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| TEST METHOD  | FORMEX™ N1J-8                             | FORMEX™ N1J-10          |
|--|---|-------------------------|
| Color  | Natural & Black                           | Natural & Black         |
| <b>MANUFACTURING SPECIFICATION</b>                 |   |                         |
| Thickness  |   |                         |
| inch   | 0.008 (+0.001/-0.001)                     | 0.010 (+0.0015/-0.0015) |
| millimeter   | 0.20 (+0.03/-0.03)                        | 0.25 (+0.04/-0.04)      |
| <b>UL FLAMMABILITY RATING / PERFORMANCE LEVELS</b> |   |                         |
| Flammability                                       | UL 94                                     | VTM-0                   |
| Relative Temperature Index                         | UL 746B                                   | VTM-0                   |
| Electrical   |   | 105°C/ 221°F            |
| Mechanical Without Impact                          |   | 105°C/ 221°F            |
| High Current Arc Ignition - PLC                    | UL 746A                                   | 0                       |
| High Voltage Arc Tracking - PLC                    | UL 746A                                   | 3                       |
| Hot Wire Ignition - PLC                            | UL 746A                                   | 0                       |
| Comparative Tracking Index - PLC                   | ASTM D-3638                               | 3                       |
| Furnished As                                       | Three layers of sheets                    | Three layers of sheets  |
| Volume Meets Mandrel Test, VAC                     | IEC 60950-1 / IEC61558-1                  | 7000                    |
| <b>TYPICAL MECHANICAL PROPERTIES VALUES</b>        |   |                         |
| Tensile Yield - psi                                | ASTM D-882 / ISO 527-1,-2                 |                         |
| Machine Direction                                  | 8200                                      | 7800                    |
| Transverse Direction                               | 7650                                      | 7380                    |
| <b>TYPICAL PHYSICAL PROPERTIES VALUES</b>          |   |                         |
| Density - gm/cc                                    | ASTM D-792 / ISO 1183-1, Method A         | 1.25                    |
| Oxygen Index - %                                   | ASTM D-2863 / ISO 4589-1,-2               | 28                      |
| Water Absorption - % Change in weight              | ASTM D-570 / ISO 62, Method 4             | 0.2%                    |
| Heat Deflection Temperature under load             | ASTM D-648 0.45MPa / ISO 75-1,-2,Method B | 139°C/ 282°F            |
| <b>TYPICAL ELECTRICAL PROPERTIES VALUES</b>        |   |                         |
| Comparative Tracking Index - volts                 | IEC 60112                                 | 175                     |
| Dielectric Breakdown - volts                       | ASTM D-149 / IEC 60243-1                  | 16,164                  |
| Dielectric Strength - volts/mil                    | ASTM D-149 / IEC 60243-1                  | 2,021                   |
| Volume Resistivity - ohm-cm                        | ASTM D-257 / IEC 62631-3-1                | 1.2 x 10 <sup>16</sup>  |
| Dielectric Constant                                | ASTM D-150 / IEC 60250, 1MHz              | 1.90                    |
| Dissipation Factor                                 | ASTM D-150 / IEC 60250, 1MHz              | 0.0081                  |
| <b>PACKAGING INFORMATION</b>                       |   |                         |
| Standard Configuration                             | Roll                                      | Roll                    |
| Core ID - inches (millimeters)                     | 6 ( 152 )                                 | 6 ( 152 )               |
| Roll OD - inches (millimeters) (approximate)       | 17 ( 432 )                                | 17 ( 432 )              |
| Roll Width - inches (millimeters)                  | 24 ( 610 )                                | 24 ( 610 )              |
| Roll Weight - lbs (kgs) (approximate)              | 206 (93)                                  | 225 (102)               |
| Length/Roll - feet (meters)                        | 2000 (609.6)                              | 1750 (533.4)            |
| Area/Roll - square feet (square meters)            | 4000 (371.6)                              | 3500 (325.2)            |

Notice: The above data is believed to be accurate and reliable. ITW assumes no responsibility for end-use application, and no performance warranty is expressed or implied.



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