

# Akulon<sup>®</sup> XS36–E2 (FC–X9201)

### PA6 copolymer

Very High Viscosity, Lubricated, Nucleated, Film Extrusion, Food Contact Quality

Print Date: 2024-10-11

| PROPERTIES                                   | TYPICAL DATA | UNIT     | TEST METHOD                   |
|--|--------------|----------|-------------------------------|
| MATERIAL SPECIFIC PROPERTIES                 | VALUE        |          |                               |
| Viscosity number                             | 245          | cm³/g    | ISO 307, 1157,<br>1628        |
| RSV formic acid, 1g/100ml                    | 3.6          | _        | Envalior Method               |
| Melt Viscosity (260 °C)                      | 2250         | Pa s     | Envalior Method,<br>260°C     |
| Density                                      | 1130         | kg/m³    | ISO 1183                      |
| THERMAL PROPERTIES                           | VALUE        |          |                               |
| Coeff. of linear therm. expansion (parallel) | 0.9          | E-4/°C   | ISO 11359-1/-2                |
| Spec. heat capacity                          | 1550         | J/(kg K) |                               |
| Average spec. heat capacity 20-150 °C        | 2250         | J/(kg K) |                               |
| MECHANICAL PROPERTIES (FILM)                 | VALUE        |          |                               |
| Modulus of elasticity                        | 465          | MPa      | Envalior Method,<br>50 mm/min |
| Stress at yield, parallel                    | 34           | MPa      | ISO 527-3                     |
| Maximum stress, parallel                     | 94           | MPa      | ISO 527-3                     |
| Maximum strain, parallel                     | 350          | %        | ISO 527-3                     |
| Trouser Tear resistance, parallel            | 32           | _        | ISO 6383-1                    |
| Puncture resistance                          | 1320         | J/m      | Envalior Method               |
| Static coefficient of friction               | 1.4          | _        | ISO 8295                      |
| Dynamic coefficient of friction              | 0.8          | _        | ISO 8295                      |

#### **OTHER PROPERTIES (FILM)**

**VALUE** 

Seller represents and warrants exclusively that on the date of delivery by Seller the product shall be in conformity with the specifications agreed upon. Seller makes no other representations or

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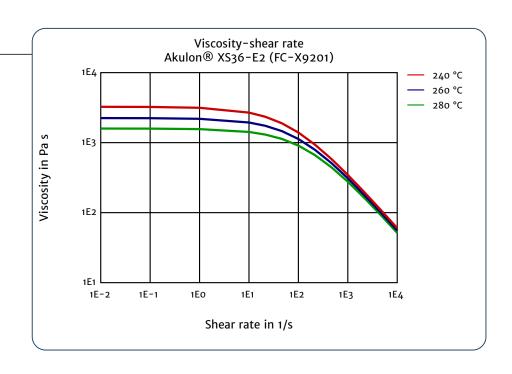
Typical values are indicative only and are not to be construed as being binding specifications. Colorants in the product or other additives may cause significant variations in typical values.

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| PROPERTIES                                    | TYPICAL DATA | UNIT           | TEST METHOD     |
|---|--------------|----------------|-----------------|
| Transparency/Clarity                          | 85           | %              | Envalior Method |
| Oxygen transmission rate at 23°C/0%r.h.       | 23           | cm³/(m²*d*bar) | DIS 15105-1/-2  |
| Oxygen transmission rate at 23°C/85%r.h.      | 33           | cm³/(m²*d*bar) | DIS 15105-1/-2  |
| Water Vapor Transmission Rate at 23°C/85%r.h. | 35           | $g/(m^{2*}d)$  | DIS 15106-1/-3  |
|   |              |                |                 |
| TEST SPECIMEN PRODUCTION (FILM)               | VALUE        |                |                 |
| Type of extrusion                             | cast         | _              |                 |
| Thickness of specimen                         | 0.05         | mm             | _               |
| Extruder temperature                          | 270          | °C             |                 |
| Die temperature                               | 270          | °C             |                 |
| Chill Roll Temperature                        | 110          | °C             |                 |

### Viscosity-shear rate



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