

# Vydyne® LUB A 30 FC BK TF2

polyamide 66



Vydyne LUB A 30 FC BK TF2 is standard flow 30% carbon-fiber reinforced, 10% PTFE lubricated PA66 resin. Available in black, it is specifically designed for high stiffness and strength. This product also has a low coefficient of friction and is electrically conductive.

## General

|                       |                                                                       |                                                     |                                                    |
|-----------------------|-----------------------------------------------------------------------|-----------------------------------------------------|----------------------------------------------------|
| Regional Availability | • North America                                                       | • Europe                                            | • Asia Pacific                                     |
| Additive              | • Lubricant                                                           |                                                     |                                                    |
| Features              | • Abrasion Resistance<br>• General Purpose<br>• High Tensile Strength | • Chemical Resistant<br>• Good Flow<br>• Lubricated | • Gasoline Resistant<br>• Good Stiffness<br>• Slip |
| Appearance            | • Black                                                               |                                                     |                                                    |
| Forms                 | • Pellets                                                             |                                                     |                                                    |
| Processing Method     | • Injection Molding                                                   |                                                     |                                                    |

## Physical

|                             | dry  | cond. | Unit              | Test Standard |
|-----------------------------|------|-------|-------------------|---------------|
| Density                     | 1.35 | -     | g/cm <sup>3</sup> | ISO 1183      |
| Molding Shrinkage           |      |       |                   | ISO 294-4     |
| Across Flow : 23°C, 2.00 mm | 0.5  | *     | %                 |               |
| Flow : 23°C, 2.00 mm        | 0.1  | *     | %                 |               |
| Water Absorption            |      |       |                   | ISO 62        |
| Equilibrium, 23°C, 50% RH   | 1.8  | *     | %                 |               |

## Mechanical

|                              | dry   | cond. | Unit | Test Standard |
|------------------------------|-------|-------|------|---------------|
| Tensile Modulus (23°C)       | 20000 | 14800 | MPa  | ISO 527-2     |
| Tensile Stress (Break, 23°C) | 225   | 180   | MPa  | ISO 527-2     |
| Tensile Strain (Break, 23°C) | 1.5   | 3     | %    | ISO 527-2     |

## Impact

|                                     | dry | cond. | Unit              | Test Standard |
|-------------------------------------|-----|-------|-------------------|---------------|
| Notched Izod Impact Strength, +23°C | 8.5 | 11    | kJ/m <sup>2</sup> | ISO 180/1A    |

## Thermal

|                             | dry | cond. | Unit | Test Standard |
|-----------------------------|-----|-------|------|---------------|
| Heat Deflection Temperature |     |       |      | ISO 75-2/A    |
| 1.80 MPa, Unannealed        | 245 | -     | °C   |               |
| 0.45 MPa, Unannealed        | 250 | -     | °C   |               |
| Melting Temperature         | 260 | *     | °C   | ISO 11357-3   |

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| Electrical                   | dry | cond. | Unit  | Test Standard |
|------------------------------|-----|-------|-------|---------------|
| Volume Resistivity (1.00 mm) | 100 | -     | Ohm*m | IEC 60093     |

| Flammability | Value | Test Standard |
|--------------|-------|---------------|
| Flammability |       | UL 94         |
| 1.50 mm      | HB    |               |
| 3.00 mm      | HB    |               |

| Injection                     | Value     | Unit |
|-------------------------------|-----------|------|
| Drying Temperature            | 90 - 110  | °C   |
| Drying Time                   | ≥ 3       | h    |
| Rear Temperature              | 270 - 280 | °C   |
| Middle Temperature            | 270 - 295 | °C   |
| Front Temperature             | 270 - 295 | °C   |
| Nozzle temperature            | 270 - 295 | °C   |
| Processing (Melt) Temperature | 270 - 295 | °C   |
| Mold Temperature              | 70 - 90   | °C   |

