

# LUVOCOM® 1/TF/18/SI/2

Polyamide 66  
Lehmann & Voss & Co.

Message:

LUVOCOM® 1/TF/18/SI/2 is a polyamide 66 (nylon 66) material. This product is available in North America, Africa and the Middle East, Latin America, Europe or Asia Pacific.

LUVOCOM®The main features of 1/TF/18/SI/2 are:

Wear-resistant

Lubrication

Typical application areas include:

engineering/industrial accessories

Electrical/electronic applications

textile/fiber

Automotive Industry

business/office supplies

| General Information            |                                 |                   |             |
|--------------------------------|---------------------------------|-------------------|-------------|
| Additive                       | PTFE lubricant                  |                   |             |
| Features                       | Low friction coefficient        |                   |             |
|                                | Good wear resistance            |                   |             |
|                                | Lubrication                     |                   |             |
| Uses                           | Gear                            |                   |             |
|                                | Textile applications            |                   |             |
|                                | Engineering accessories         |                   |             |
|                                | Switch                          |                   |             |
|                                | Application in Automobile Field |                   |             |
|                                | Business equipment              |                   |             |
|                                | Bearing                         |                   |             |
| Appearance                     | Natural color                   |                   |             |
| Physical                       | Nominal Value                   | Unit              | Test Method |
| Density                        | 1.25                            | g/cm <sup>3</sup> | ISO 1183    |
| Molding Shrinkage              | 1.2 - 1.7                       | %                 | DIN 16901   |
| Water Absorption (23°C, 24 hr) | < 1.0                           | %                 |             |
| Mechanical                     | Nominal Value                   | Unit              | Test Method |
| Tensile Modulus                | 2500                            | MPa               | ISO 527-2   |
| Tensile Stress (Break)         | 65.0                            | MPa               | ISO 527-2   |
| Tensile Strain (Yield)         | 6.0                             | %                 | ISO 527-2   |
| Flexural Modulus               | 2200                            | MPa               | ISO 178     |
| Flexural Stress                | 90.0                            | MPa               | ISO 178     |
| Coefficient of Friction        |                                 |                   |             |
| Dynamic                        | 0.090                           |                   |             |

|  |                      |                   |                    |
|--|----------------------|-------------------|--------------------|
| Static                                   | 0.070                |                   |                    |
| Flexural Strain at Flexural Strength     | 8.0                  | %                 | ISO 178            |
| Maximum operating temperature-Short Term | 140                  | °C                |                    |
| Insulation Resistance                    | > 1.0E+12            | ohms              | IEC 60167          |
| <b>Impact</b>                            | <b>Nominal Value</b> | <b>Unit</b>       | <b>Test Method</b> |
| Charpy Notched Impact Strength (23°C)    | 8.0                  | kJ/m <sup>2</sup> | ISO 179/1eA        |
| Charpy Unnotched Impact Strength         |                      |                   | ISO 179/1fU        |
| -30°C                                    | 40                   | kJ/m <sup>2</sup> | ISO 179/1fU        |
| 23°C                                     | 50                   | kJ/m <sup>2</sup> | ISO 179/1fU        |
| <b>Thermal</b>                           | <b>Nominal Value</b> | <b>Unit</b>       | <b>Test Method</b> |
| Continuous Use Temperature               | 100                  | °C                | UL 746B            |
| Vicat Softening Temperature              | 230                  | °C                | ISO 306/A          |
| CLTE - Flow                              | 6.0E-5               | cm/cm/°C          | DIN 53752          |
| Thermal Conductivity                     | 0.23                 | W/m/K             | DIN 52612          |
| <b>Electrical</b>                        | <b>Nominal Value</b> | <b>Unit</b>       | <b>Test Method</b> |
| Surface Resistivity                      | > 1.0E+12            | ohms              | IEC 60093          |
| <b>Injection</b>                         | <b>Nominal Value</b> | <b>Unit</b>       |                    |
| Drying Temperature                       |                      |                   |                    |
| Hot air dryer, A                         | 75.0                 | °C                |                    |
| Vacuum dryer, B                          | 105                  | °C                |                    |
| Drying Time                              |                      |                   |                    |
| Hot air dryer, A                         | 6.0 - 16             | hr                |                    |
| Vacuum dryer, B                          | 4.0 - 6.0            | hr                |                    |
| Suggested Max Moisture                   | 0.10                 | %                 |                    |
| Rear Temperature                         | 290 - 310            | °C                |                    |
| Middle Temperature                       | 290 - 310            | °C                |                    |
| Front Temperature                        | 290 - 310            | °C                |                    |
| Nozzle Temperature                       | 280 - 300            | °C                |                    |
| Processing (Melt) Temp                   | 290                  | °C                |                    |
| Mold Temperature                         | 90.0 - 120           | °C                |                    |
| Injection instructions                   |                      |                   |                    |

#### General

In general LUVOCOM® can be processed on conventional injection moulding machines while observing the usual technical guidelines.

Any added fibrous materials or fillers may have an abrasive effect. In this case the cylinder and screw should be protected against wear as is usual in the processing of reinforced thermoplastic materials.

Lengthy dwell times for the melts in the cylinder should be avoided.

Lower the temperatures during interruptions!

Predrying (optional)

It is advisable to predry the granulate with a suitable dryer immediately before processing.

The granulate may absorb moisture from the air.

Delivery Form & Storage

Unless indicated otherwise, the material is delivered as 3mm-long pellets in sealed bags on pallets.

Preferably storage should be effected in dry and normally temperatured rooms

Additional Information

During processing the moisture level should not exceed 0.1%, otherwise molecular degradation and surface defects (e.g. smearing) may occur. Due to rapid absorption of water, originally sealed containers should only be opened immediately prior to processing. Excessively high predrying temperatures may cause discoloration.

The processing notes provided merely represent a recommendation for general use. Due to the large variety of machines, geometries and volumes of parts, etc., it may be necessary to employ different settings according to the specific application.

Please contact us for further information.

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#### Recommended distributors for this material

### Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

