# LUVOCOM® 1502-8752

## Polyphenylsulfone

Lehmann & Voss & Co.

#### Message:

LUVOCOM® 1502-8752 is a polyphenylene sulfone (PPSU) material. This product is available in North America, Africa and the Middle East, Latin America, Europe or Asia Pacific.

Good chemical resistance

LUVOCOM®The main features of 1502-8752 are:

flame retardant/rated flame

Flame Retardant

sterilizable

chemical resistance

Typical application areas include:

engineering/industrial accessories

Aerospace

Features

Automotive Industry

medical/health care

General Information

|                                       | Hydrolysis resistance           |          |             |  |
|---------------------------------------|---------------------------------|----------|-------------|--|
|                                       | Disinfect with steam            |          |             |  |
|                                       | Flame retardancy                |          |             |  |
|                                       |                                 |          |             |  |
| Uses                                  | Engineering accessories         |          |             |  |
|                                       | Aerospace applications          |          |             |  |
|                                       | Application in Automobile Field |          |             |  |
|                                       | Medical/nursing supplies        |          |             |  |
|                                       |                                 |          |             |  |
| Appearance                            | White                           |          |             |  |
| Physical                              | Nominal Value                   | Unit     | Test Method |  |
| Density                               | 1.44                            | g/cm³    | ISO 1183    |  |
| Melt Mass-Flow Rate (MFR) (380°C/10.0 |                                 |          |             |  |
| kg)                                   | 40                              | g/10 min | ISO 1133    |  |
| Molding Shrinkage                     | 0.50 - 0.70                     | %        | DIN 16901   |  |
| Water Absorption (23°C, 24 hr)        | < 0.50                          | %        |             |  |
| Mechanical                            | Nominal Value                   | Unit     | Test Method |  |
| Tensile Modulus                       | 2800                            | MPa      | ISO 527-2   |  |
| Tensile Stress (Break)                | 78.0                            | MPa      | ISO 527-2   |  |
| Tensile Strain (Yield)                | 7.0                             | %        | ISO 527-2   |  |
| Flexural Modulus                      | 2200                            | MPa      | ISO 178     |  |
| Flexural Stress                       | 115                             | МРа      | ISO 178     |  |
| Flexural Strain at Flexural Strength  | 9.5                             | %        | ISO 178     |  |
| Maximum operating temperature-Short   |                                 |          |             |  |
| Term                                  | 180                             | °C       |             |  |

| Insulation Resistance                 | > 1.0E+12     | ohms     | IEC 60167   |
|---------------------------------------|---------------|----------|-------------|
| Thermal                               | Nominal Value | Unit     | Test Method |
| Heat Deflection Temperature (1.8 MPa, |               |          |             |
| Unannealed)                           | 210           | °C       | ISO 75-2/A  |
| Continuous Use Temperature            | 160           | °C       | UL 746B     |
| CLTE - Flow                           | 5.2E-5        | cm/cm/°C | DIN 53752   |
| Electrical                            | Nominal Value | Unit     | Test Method |
| Surface Resistivity                   | > 1.0E+12     | ohms     | IEC 60093   |
| Flammability                          | Nominal Value | Unit     | Test Method |
| Flame Rating <sup>1</sup>             | V-0           |          | UL 94       |
| Injection                             | Nominal Value | Unit     |             |
| Drying Temperature                    |               |          |             |
| Hot air dryer, A                      | 180           | °C       |             |
| Hot air dryer, B                      | 140           | °C       |             |
| Drying Time                           |               |          |             |
| Hot air dryer, A                      | 2.0 - 3.0     | hr       |             |
| Hot air dryer, B                      | 4.0 - 5.0     | hr       |             |
| Suggested Max Moisture                | 0.050         | %        |             |
| Rear Temperature                      | 360 - 370     | °C       |             |
| Middle Temperature                    | 380 - 390     | °C       |             |
| Front Temperature                     | 390 - 400     | °C       |             |
| Nozzle Temperature                    | 360 - 380     | °C       |             |
| Processing (Melt) Temp                | 390           | °C       |             |
| Mold Temperature                      | 150 - 170     | °C       |             |

#### 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 0.05%, otherwise porosity and surface defects (e.g. smearing) may occur. To avoid internal stresses, a low shear load should be used for processing. The parts may be tempered at a later stage to reduce internal stresses.

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.

High-temperature polymers place increased demands on the tool steels employed.

Please contact us for further information.

#### NOTE

1.

Not recognized by UL.

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