DEMAK® GROUP
RESIN DISPENSING TECHNOLOGY

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*passion for innovation*

## APPLICATION

Two-component transparent polyurethane system, used for **led encapsulation**, thanks to its high light transmission. Good electrical insulation.

## DESCRIPTION

By direct casting @ RT and pressure, after degassing cycle for both components. A DEMAK dosing/mixing equipment is recommended.

| | RESIN: | HARDENER: |
|---|---|---|
| | **SEPUR -E 540 RT** | **DK 100 HV** |
| Ratio byW | **99±1** | **100** |
| Ratio byV | **100** | **100** |

**LED ENCAPSULATION**

## PROCESSING

Main advantage of this System is to have a complete curing, in some hours @ Room Temperature, not with standing its initial slow reactivity.
The final cured polymer shows a VERY SOFT elastic behaviour.
Good chemical and outdoor resistance

## MAIN PROPERTIES

| | |
|---|---|
| **System compliance** | **REGULATION ( EU) 2017/852 OF THE EUROPEAN PARLIAMENT**<br>**REACH, RoHS and ELV European DIRECTIVES** |

| | SEPUR -E 540 RT | DK 100 HV | Unit | Test Method/Condition |
|---|---|---|---|---|
| **Storage Stability (15-25°C)** | **12** | **12** | Months | Storage for sealed drums with original white cups safe closure |
| **Color** | Transparent | Transparent | / | / |
| **Specific Gravity at 23°C** | 1,06 | 1,075 | | |
| **Brookfield Viscosity at 23°C** | **250-550** | **200-450** | mPas | Internal Method |
| **Initial mixture Viscosity** | 300-400 | | mPas | Internal Method |
| **Gel time at 25°C - 20g** | 35-45 | | min | |
| **Pot life at 25°C - 30g - double initial viscosity** | 7 | | min | DIN 16945-16916 |
| **Pot life at 25°C -machine alarm** | 120 | | sec | |
| **Surface Tack free - removable** | 2-3 | | Hours | at 23°-25 °C 40% R.H. |
| **Final Curing** | 10-12 | | Hours | at 23°-25 °C 40% R.H. |
| **Hardness at 23°C** | **22-28** | | Shore D | ASTM D 2240 |
| | 70 - 75 | | Shore A | ASTM D 2240 |
| **Glass Transition** | 15-18 | | °C | ASTM D 3418 |
| **Water absorption - 24h at 25°C** | 0,3 | | % | ISO R117 |
| **Thermal Conductivity** | 0,2 | | W/M°K | ISO 220007-2 |
| **Operating Temperature** | - 40°C / + 90 °C | | Thermal Class 90°C(Y) | |
| **Flammability** | HB ( 5 mm) Listed | | rating | UL 94 |

**2017**

The data highlighted in grey are parameters systematically verified for each production batch. All above mentioned information are based on results gained from experience and re believed to be accurate but are given without acceptance of liability for application and characteristics of finished products, depending on technology and working methods of final