

## Lustran ABS 450

Medium impact strength, high flow, injection molding grade

| Property  | Test Condition | Unit              | Standard          | Value   |
|---|----------------|-------------------|-------------------|---------|
| <b>Rheological properties</b>                   |                |                   |                   |         |
| Melt flow index                                 | 220 °C; 10 kg  | g/(10 min)        | ISO 1133          | 27      |
| Molding shrinkage, normal                       |                | %                 | ISO 294-4         | 0.4-0.6 |
| <b>Mechanical properties (23 °C/50 % r. h.)</b> |                |                   |                   |         |
| Yield stress                                    | 50 mm/min      | MPa               | ISO 527-1,-2      | 48      |
| Tensile Stress at break                         | 50 mm/min      | MPa               | ISO 527-1,-2      | 34      |
| Tensile Strain at break                         | 50 mm/min      | %                 | acc. ISO 527-1,-2 | 20      |
| Tensile modulus                                 | 1 mm/min       | MPa               | ISO 527-1,-2      | 2500    |
| Flexural strength                               | 2 mm/min       | MPa               | ISO 178           | 71      |
| Flexural modulus                                | 2 mm/min       | MPa               | ISO 178           | 2400    |
| Izod notched impact strength                    | 23 °C          | kJ/m <sup>2</sup> | ISO 180-1A        | 17      |
| Izod notched impact strength                    | -20 °C         | kJ/m <sup>2</sup> | ISO 180-1A        | 13      |
| Izod notched impact strength                    | -30 °C         | kJ/m <sup>2</sup> | ISO 180-1A        | 7       |
| Rockwell hardness                               |                | R Scale           | ISO 2039-2        | 113     |
| <b>Thermal properties</b>                       |                |                   |                   |         |
| Temperature of deflection under load            | 1.80 MPa       | °C                | ISO 75-1,-2       | 92      |
| Temperature of deflection under load            | 0.45 MPa       | °C                | ISO 75-1,-2       | 96      |
| Vicat softening temperature                     | 50 N; 120 °C/h | °C                | ISO 306           | 99      |
| Burning behavior UL 94 (1.6 mm)                 | 1.6 mm         | Class             | UL 94             | HB      |
| <b>Other properties (23 °C)</b>                 |                |                   |                   |         |
| Density   |                | g/cm <sup>3</sup> | ISO 1183          | 1.05    |
| Gloss   | 60 °           | -                 | ISO 2813          | 90      |

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### Disclaimer

#### Disclaimer for Sales products

This information and our technical advice - whether verbal, in writing or by way of trials - are given in good faith but without warranty, and this also applies where proprietary rights of third parties are involved. Our advice does not release you from the obligation to verify the information currently provided - especially that contained in our safety data and technical information sheets - and to test our products as to their suitability for the intended processes and uses. The application, use and processing of our products and the products manufactured by you on the basis of our technical advice are beyond our control and, therefore, entirely your own responsibility. Our products are sold in accordance with the current version of our General Conditions of Sale and Delivery.

#### Test values styrenics

Unless specified to the contrary, the values given have been established on standardised test specimens at room temperature. The figures should be regarded as guide values only and not as binding minimum values. Kindly note that, under certain conditions, the properties can be affected to a considerable extent by the design of the mould/die, the processing conditions and the colouring. This is valid especially for CTI.

#### Processing note

Under the recommended processing conditions small quantities of decomposition product may be given off during processing. To preclude any risk to the health and well-being of the machine operatives, tolerance limits for the work environment must be ensured by the provision of efficient exhaust ventilation and fresh air at the workplace in accordance with the Safety Data Sheet. In order to prevent the partial decomposition of the polymer and the generation of volatile decomposition products, the prescribed processing temperatures should not be substantially exceeded. Since excessively high temperatures are generally the result of operator error or defects in the heating system, special care and controls are essential in these areas.

**Styrolution** (Thailand) Co., Ltd. 4/2 I-8 road, Map Ta Phut Industrial Estate, Rayong, Thailand