



# ABS VM

## Product information

### Brief characteristic (typical values):

Extremely high impact acrylonitrile butadiene styrene copolymer (ABS) with good thermoforming properties.

Tuhips VM has a good heat resistance and an improved stress cracking resistance.

### Mechanical properties

Yield strength ISO 527 MPa 40

Elongation at yield ISO 527 % 2,5

Tensile strength at break ISO 527 MPa 38

Elongation at break ISO 527 % > 10

Modulus of elasticity EN ISO 527 MPa 2100

Flexural stress at conventional deflection DIN 53452 N/mm<sup>2</sup>

Impact strength at 23°C EN ISO 179/1eU kJ/m<sup>2</sup> without break

Impact strength at -30°C EN ISO 179/1eU kJ/m<sup>2</sup> without break

Impact strength notched at 23°C EN ISO 179/1eA kJ/m<sup>2</sup> ≥ 36

Impact strength notched at -30°C EN ISO 179/1eA kJ/m<sup>2</sup> 15

Shore hardness DIN 53505 D 81

### Thermal properties

Vicat softening point VST B 50 ISO 306 °C 96

ISO/R75 process A ISO 75 °C

ISO/R75 process B ISO 75 °C

Continuous working temperature °C -40/ +80

Thermal coefficient of linear expansion ISO 7991 10<sup>-5</sup>/K ~ 9

Thermal conductivity ISO 8302 W/Km

Specific heat kJ/kgK 1

### Electrical properties

Dielectric constant (at 1 MHz) IEC 250

Dissipation factor IEC 250 10<sup>-4</sup>

Specific volume resistivity DIN EN 61340-5-1 Ω cm > 10<sup>15</sup>

Surface resistivity DIN EN 61340-5-1 Ω > 10<sup>14</sup>

Dielectric strength VDE 0303 kV/mm

Resistance of tracking DIN 53480 level

### Other properties

Burning behaviour UL 94 HB

Shrinkage % 0,4 – 0,6

Water absorption, till saturation ISO 62 % 0,3

Density ISO 1183 g/cm<sup>3</sup> 1,01

The information submitted on this paper is based on our current knowledge and experience. In view of the many factors that may affect processing and application, these data do not relieve processors from the responsibility of carrying out their own tests and experiments; neither do they imply any legally binding assurance of certain properties or of suitability for a specific purpose. It is the responsibility of those to whom we supply our products to ensure that any proprietary rights and existing laws and legislation are observed.

