

## WIPAFLEX TV10 BK

(Stand: 22.05.2021)

|                      |                     |
|----------------------|---------------------|
| Base Polymer         | PP/PE/EPDM          |
| Filler               | 10% talc            |
| Colour               | black               |
| Special Features     | heat stabilized     |
| Typical Applications | automotive, various |

|                       |                                                                                                           |
|-----------------------|-----------------------------------------------------------------------------------------------------------|
| Pre Drying Conditions | circulation-air dryer 60-100°C<br>for 2-4h, dependant on moisture content<br>max. moisture content <0,10% |
| Processing Conditions | injection moulding melt temperature 200-270°C<br>injection moulding mould temperature 20-60°C             |
| Storage               | dry, protected from light                                                                                 |

| Properties                             | Value | Dimension              | Test Norm    |
|----------------------------------------|-------|------------------------|--------------|
| <b>Mechanical Properties</b>           |       |                        |              |
| Tensile modulus                        | 1200  | MPa                    | ISO 527-1/-2 |
| Tensile strength                       | 15    | MPa                    | ISO 527-1/-2 |
| Tensile elongation at break            | 40    | %                      | ISO 527-1/-2 |
| Flexural modulus                       | 1000  | MPa                    | ISO 178      |
| Flexural strength                      | 20    | MPa                    | ISO 178      |
| Charpy Impact strength unnotched 23°C  | 95    | kJ/m <sup>2</sup>      | ISO 179/1eU  |
| Charpy Impact strength unnotched -40°C | 31    | kJ/m <sup>2</sup>      | ISO 179/1eU  |
| Charpy Impact strength notched 23°C    | 25    | kJ/m <sup>2</sup>      | ISO 179/1eA  |
| Charpy Impact strength notched -40°C   | 2,5   | kJ/m <sup>2</sup>      | ISO 179/1eA  |
| Hardness – Shore D                     | 60    |                        | ISO 868      |
| <b>Thermal Properties</b>              |       |                        |              |
| Vicat B50                              | 54    | °C                     | ISO 306      |
| HDT/A (1,8 MPa)                        | 56    | °C                     | ISO 75-1/-2  |
| HDT/B (0,45 MPa)                       | 88    | °C                     | ISO 75-2     |
| Melt Point (DSC)                       | 163   | °C                     | ISO 11357    |
| Aging (150°C/circulating air)          | 850   | h                      | ISO 11357    |
| <b>Rheological Properties</b>          |       |                        |              |
| MVR                                    | 13    | cm <sup>3</sup> /10min | ISO 1133     |
| MVR temperature                        | 230   | °C                     | -            |
| MVR load                               | 2,16  | Kg                     | -            |
| Hardnes Shore D                        | 60    |                        | DIN 53505    |
| Shrinkage – lengthwise                 | 1,0   | %                      | ISO 294-4    |
| Shrinkage - lateral                    | 1,1   | %                      | ISO 294-4    |

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### Physical Properties

|         |     |                   |          |
|---------|-----|-------------------|----------|
| Density | 980 | kg/m <sup>3</sup> | ISO 1183 |
|---------|-----|-------------------|----------|

|                                          |             |                                |                                      |
|------------------------------------------|-------------|--------------------------------|--------------------------------------|
| <b>CO<sub>2</sub>-Footprint (GWP100)</b> | <b>0,83</b> | <b>[kg CO<sub>2</sub> eq.]</b> | <b>GaBi (DIN EN ISO 14040/14044)</b> |
|------------------------------------------|-------------|--------------------------------|--------------------------------------|

These are guide values and not a specification. The test values mentioned are representative values only and not binding minimum or maximum figures. These test values have been determined on standardized test specimens and can be affected by pigmentation, mould design and processing conditions.

Any information given on the chemical and physical characteristics of our products, including, without limitation, technical advice on applications, whether verbally, in writing or by testing the product, is given to the best of our knowledge and in good faith and does not exempt the buyer from carrying out their own investigations and tests in order to ascertain the product's specific suitability for the purpose intended. The buyer is solely responsible for confirming the suitability of the product for a particular application, its utilization and processing and must observe any applicable laws and government regulations.

NO EXPRESS OR IMPLIED RECOMMENDATION OR WARRANTY IS GIVEN WITH REGARD TO THE SUITABILITY OF THE PRODUCT FOR A PARTICULAR APPLICATION, SUCH AS, BUT NOT LIMITED TO; SAFETY-CRITICAL COMPONENTS OR SYSTEMS.

**Important:** Irrespective of product type or designation, WIPAG does not recommend or support the use of any products it supplies which fall in the following medical, pharmaceutical or diagnostic application categories.

- risk class III applications according to EU directive 93/42/EEC
- any bodily implant applications for greater than 30 days
- any critical component in any medical device that supports or sustains human life.

At all times, our standard terms and conditions of sale apply.

### Additional Information:

In general the existence of residual amounts of ferrous and non-ferrous metals cannot be completely ruled out in recycle feed stocks. In order to minimize potential negative effects of such inclusions, WIPAG employs extensive metal (and non-metal) detection and separation systems in the production of its WIPELAST/WIPAFLEX compounds. However, even the highest product quality assurance processes cannot guarantee zero levels of ferrous and non-ferrous metal in the final product. To further reduce risk, moulders are therefore advised to deploy their own detection and separation techniques. In particular, special measures are advised to be employed with hot runner tools. Due to the use of painted components, residual paint particles can never be completely excluded. Despite the high technical standard of depaint and melt filtration, 100% purity is not possible, so residual paint particles may be visible on the surface. For any questions or advice concerning development of parts with WIPELAST/WIPAFLEX grades please contact our TSAD department.