# INEOS ABS

# Novodur L3FR

flame retardant

ISO Shortname: ABS 1,MGF,085-25-09-25

Property	Test Condition	Unit	Standard	Value
Rheological properties				
Melt volume-flow rate	220 °C; 10 kg	cm <sup>3</sup> /(10 min)	ISO 1133	50
Mechanical properties (23 °C/50 % r. h.)				
Yield stress	50 mm/min	MPa	ISO 527-1,-2	42
Tensile modulus	1 mm/min	MPa	ISO 527-1,-2	2400
Izod notched impact strength	23 °C	kJ/m²	ISO 180-1A	8
Izod notched impact strength	-30 °C	kJ/m²	ISO 180-1A	4
Izod impact strength	23 °C	kJ/m²	ISO 180-1U	60
Izod impact strength	-30 °C	kJ/m²	ISO 180-1U	40
Ball indentation hardness		N/mm²	ISO 2039-1	105
Thermal properties				
Temperature of deflection under load	1.80 MPa	°C	ISO 75-1,-2	85
Temperature of deflection under load	0.45 MPa	°C	ISO 75-1,-2	89
Vicat softening temperature	50 N; 120 °C/h	°C	ISO 306	88
Vicat softening temperature	50 N; 50 °C/h	°C	ISO 306	85
Burning behavior UL 94 (1.6 mm)	1.6 mm	Class	UL 94	V-0
Coefficient of linear thermal expansion, parallel	23 to 55 °C	10 <sup>-4</sup> /K	ISO 11359-1,-2	0.9
Glow wire test (GWFI)	2.0 mm	°C	IEC 60695-2-12	960
Electrical properties (23 °C/50 % r. h.)				
Relative permittivity	100 Hz	-	IEC 60250	3.0
Relative permittivity	1 MHz	-	IEC 60250	3.0
Dissipation factor	100 Hz	10-4	IEC 60250	70
Dissipation factor	1 MHz	10 <sup>-4</sup>	IEC 60250	80
Volume resistivity		Ohm⋅m	IEC 60093	1E15
Surface resistivity		Ohm	IEC 60093	1E15
Comparative tracking index CTI	Solution A	Rating	IEC 60112	450
Other properties (23 °C)				
Density		g/cm³	ISO 1183	1.180
Processing conditions for test specimens				
Injection molding-Melt temperature		°C	ISO 294	230
Injection molding-Mold temperature		°C	ISO 294	70
Injection molding-Injection velocity		mm/s	ISO 294	200

C These property characteristics are taken from the CAMPUS plastics data bank and are based on the international catalogue of basic data for plastics according to ISO 10350.

Data Sheet



Data Sheet

**Novodur L3FR** 

## 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 and our advisory service is given in accordance with the current version of our General Conditions of Sale and Delivery.

#### Test values

Unless specified to the contrary, the values given have been established on standardized 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.

#### 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.

### INEOS ABS (Deutschland) GmbH, D-50769 Köln

© INEOS ABS (Deutschland)