

**Novodur® Ultra 4105**  
 (ABS+PC)

INEOS Styrolution

Novodur® Ultra 4105 acrylonitrile butadiene styrene (ABS) polymer features high surface quality and good impact strength. Novodur® Ultra 4105 is a PC modified high heat injection molding grade with very high impact strength. Furthermore, it is of low emission, i.e. suitable to produce parts which fulfill interior emission requirements of the automotive OEMs.

Rheological properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Melt volume-flow rate, MVR	14	cm³/10min	ISO 1133
Temperature	260	°C	-
Load	5	kg	-

Mechanical Properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Tensile Modulus	2000	MPa	ISO 527
Yield stress	45	MPa	ISO 527
Yield strain	3.7	%	ISO 527
Impact Strength (Charpy), +23°C	no break	kJ/m²	ISO 179/1eU
Impact Strength (Charpy), -30°C	no break	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	40	kJ/m²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	32	kJ/m²	ISO 179/1eA

Thermal Properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Temp. of deflection under load (1.80 MPa)	99	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	108	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	107	°C	ISO 306
Coeff. of Linear Therm. Expansion, parallel	90	E-6/K	ISO 11359-1/-2

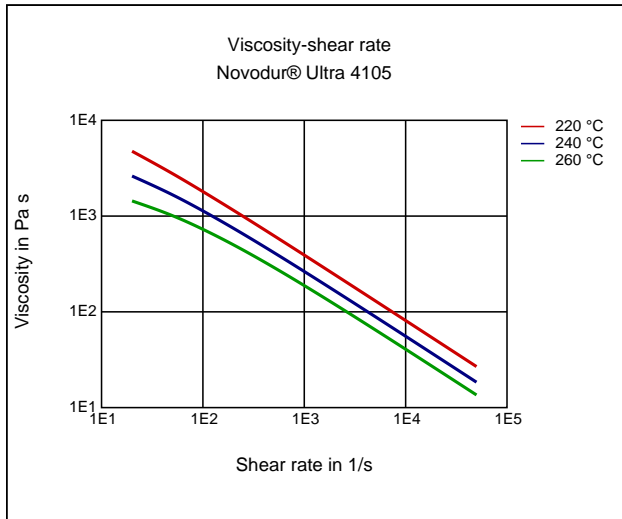
Electrical Properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Electric Strength	37	kV/mm	IEC 60243-1
Comparative tracking index	600	-	IEC 60112

Other Properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Density	1070	kg/m³	ISO 1183

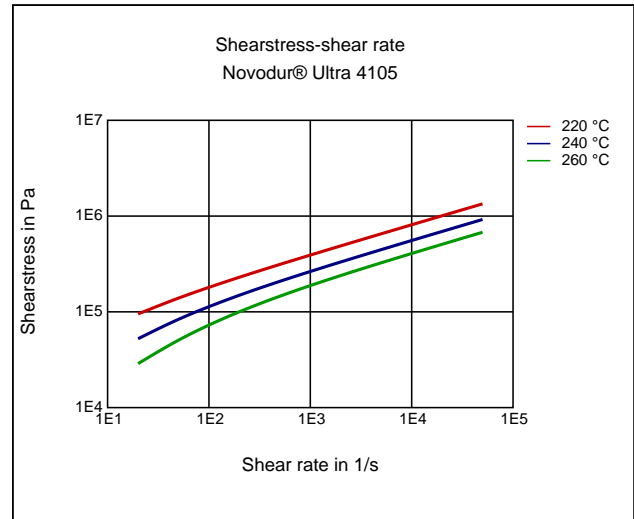
Rheological calculation properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Density of melt	972	kg/m³	-
Thermal Conductivity of Melt	0.232	W/(m K)	-
Spec. heat capacity of melt	2330	J/(kg K)	-
Ejection temperature	94	°C	-

## Diagrams

### Viscosity-shear rate



### Shearstress-shear rate



## Characteristics

### Processing

Injection Molding

### Delivery form

Pellets

### Features

Low Emission

## Injection Molding

### PREPROCESSING

Pre-drying, Temperature: 80 °C

Pre-drying, Time: 2 - 4h

### PROCESSING

Melt temperature, range: 230 - 260 °C

Mold temperature, range: 60 - 80 °C

## Disclaimer

### Liability Exclusion

These guide values are measured and provided by the product manufacturer and have been determined on standardised test specimens and can be affected by pigmentation, mould design and processing conditions. M-Base has taken the guide values from the producer's original Technical Data Sheet. **ALBIS AND M-BASE ARE THEREFORE NOT RESPONSIBLE FOR THE ACCURACY OF THE GUIDE VALUES AND CANNOT GIVE ANY WARRANTY WITH REGARD TO THEIR CORRECTNESS.**

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