INEOS Styrolution

Novodur® Ultra 4255

(ABS+PC) INEOS Styrolution

Novodur® Ultra 4255 acrylonitrile butadiene styrene (ABS) polymer features high surface quality and good impact strength. Novodur® Ultra 4255 is PC modified injection molding grade combining very high impact strength at room as well as at low temperature, 100 % ductility at -30 °C, high heat resistance and a best in class flowability. 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
ISO Data			
Melt volume-flow rate, MVR	17	cm³/10min	ISO 1133
Temperature	260	°C	-
Load	5	kg	-

Mechanical Properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2100	MPa	ISO 527
Yield stress	47	MPa	ISO 527
Yield strain	4.1	%	ISO 527
Nominal strain at break	>50	%	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	55	kJ/m²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	55	kJ/m²	ISO 179/1eA

Thermal Properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load (1.80 MPa)	103	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	116	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	110	°C	ISO 306
Burning Behav. at 1.5 mm Nom. Thickn.	HB	class	UL 94
Thickness tested	1.5	mm	-
UL recognition	yes	-	-
Burning Behav. at thickness h	HB	class	UL 94
Thickness tested	3.0	mm	-
UL recognition	yes	-	-

Electrical Properties	Value	Unit	Test Standard
ISO Data			
Electric Strength	35	kV/mm	IEC 60243-1
Comparative tracking index	275	-	IEC 60112

Other Properties	Value	Unit	Test Standard
ISO Data			
Density	1100	kg/m³	ISO 1183

Rheological calculation properties	Value	Unit	Test Standard
ISO Data			
Density of melt	966	kg/m³	-
Thermal Conductivity of Melt	0.211	W/(m K)	-
Spec. heat capacity of melt	2250	J/(kg K)	-
Ejection temperature	101	°C	-

Characteristics

Processing
Injection Molding

Features
Low Emission

Delivery form
Pellets

Injection Molding

PREPROCESSING

Pre-drying, Temperature: 80 - 90 °C
Pre-drying, Time: 2 - 4h
PROCESSING
Melt temperature, range: 250 - 270 °C
Mold temperature, range: 60 - 80 °C

Disclaimer

Liability Exclusion
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