



novalca

NOVAKRAL® ABS MTR

**ABS compound,
Improved heat grade**

MTR: improved heat grade, for injection molding of parts requiring an improved thermal resistance in comparison with standard grades (automotive parts, housings).

GENERAL PROCESSING PARAMETERS FOR INJECTION MOLDING		
DRYING CONDITIONS	BARREL TEMPERATURE	MOULD TEMPERATURE
80°C x 2 ÷ 4 hours Maximum moisture content after drying ≤ 0.05%	210 ÷ 250 °C	60 ÷ 80 °C
PACKAGING		
25 Kg Bags, 1000 Kg Octabins, 750 Kg Boxes		

PROPERTIES	METHOD		UNIT	TYPICAL VALUES
PHYSICAL				
Density	ASTM D792	ISO 1183	gr/cm ³	1.05
Humidity Absorption (equilibrium, in air, +23°C – 50% RH)	INTERNAL METHOD		%	0.30
Mould Shrinkage	INTERNAL METHOD		%	0.4 ÷ 0.7
Melt Flow Index MFI (220 °C - 10 Kg)	ASTM D1238	ISO 1133	g/10'	12
MECHANICAL				
Tensile strength: stress at yield	ASTM D638	ISO 527-1,-2	MPa	38
strain at yield	ASTM D638	ISO 527-1,-2	%	2.5
Flexural modulus	ASTM D790	ISO 178	MPa	2450
IZOD notched impact strength, at 23 °C	ASTM D256	-	J/m	140
Specimen dimensions 62.5 mm x 12.7 mm x 3.2 mm				
THERMAL				
VICAT softening temperature at 49 N-120 °C/h	ASTM D1525/B	ISO 306/B	°C	102
ELECTRICAL				
Surface resistivity	ASTM D257	IEC 60093	Ohm	1E14
Dielectric strenght	ASTM D149	IEC 60243-1	KV/mm	34
Dielectric constant at 10 ⁶ Hz	ASTM D150	IEC 60250	-	3.0
Dissipation factor -10 ⁶ Hz	ASTM D150	IEC 60250	-	0.01
Comparative tracking index (solution A, CTI)	VDE 0303-P1	IEC 60112	V	600
FLAMMABILITY				
Flammability UL94 (thickness 3.2 mm)	UL 94		Class	HB
Flammability UL94 (thickness 1.6 mm)	UL 94		Class	HB
Glow wire flammability GWFI (thickness 3.2 mm)	IEC 60695-2-12		°C	650
Glow wire flammability GWFI (thickness 2 mm)	IEC 60695-2-12		°C	650
Burning rate FMVSS302 (thickness 2.2/ 3.2 mm)	ISO 3795		mm/min	passed

Our technical data are provided for guidance purpose only and are based on average values. The data are not meant to be used for specification or warranted purposes. Values may be affected by the design of the mold/die, the processing conditions and coloring/pigmentation of the product. Unless specified to the contrary, the data have been established on standardized test specimens at room temperature. All technical information is subject to continuous update, so the customer shall always ensure that the latest release of technical information is at his own disposal. It is the customer's responsibility to inspect and test our products in order to determine to his own satisfaction whether they are suitable for his intended uses and applications or used in conjunction with third-party materials. Unless specifically stated with reference to the specific color code, the products mentioned herein are not suitable for applications in the pharmaceutical, medical, dental and toys sectors, in contact with foodstuff or for potable water transportation. *Properties measured on injection molded laboratory bars and plates

Updating: January 2025
Printing date: 17 December 2025