

MOPLEN MR230C

MOPLEN MR230C is a polypropylene random copolymer grade, designed for hot and cold water supply systems.

It is also suitable for industrial water conveyance.

The material has excellent creep properties and processability by extrusion and by injection moulding.

TYPICAL PROPERTIES (a)	ISO (b) METHOD	UNIT	VALUE	ASTM (b) METHOD	UNIT	VALUE
Physical properties						
Melt flow rate (190°C, 5 kg)	R 1133	g/10 min	0.4 - 0.6	D 1238 L	g/10 min	0.4 - 0.6
Melt flow rate (230°C, 2.16 kg)	R 1133	g/10 min	< 0.3	D 1238 L	g/10 min	< 0.3
Melt flow rate (230°C, 5 kg)	R 1133	g/10 min	0.8 - 1.3	D 1238 L	g/10 min	0.8 - 1.3
Hardness Rockwell	R 2039/2	R scale	93			
Linear coefficient of expansion				D 696	mm/(m*°C)	0.11
Thermal conductivity (23°C)	R 3146	W/(m.K)	0.17			
Specific gravity	R 1183	-	0.89	D 792	-	0.89
Mechanical properties						
Flexural modulus	R 178	MPa	835	D 790	MPa	950
Tensile strength at yield	R 527	MPa	28	D 638	MPa	28
Elongation at break	R 527	%	>430	D 638	%	>430
Notched Izod Impact strength at 23°C	R 180/1A	kJ/m ²	NB	D 256	J/m	NB
	at 0°C	R 180/1A	kJ/m ²	D 256	J/m	160
	at -20°C	R 180/1A	kJ/m ²	D 256	J/m	50
Unnotched Izod imp. strength at 23°C	R 180/1A	kJ/m ²	NB	D 256	J/m	NB
	at 0°C	R 180/1A	kJ/m ²	D 256	J/m	NB
Thermal properties						
Vicat softening point (9.8 N)	R 306	°C	135	D 1525	°C	135
H.D.T. (0.45 MPa)	R 75	°C	80	D 648	°C	80
Accelerated oven ageing at 135°C	R 4577	hours	>9,000	D 3012	hours	>9,000

a) Values shown are averages and not to be considered as product specifications. These values may shift slightly as more data is accumulated

b) ASTM and ISO test methods are the latest under the Society current procedures. All specimens are prepared by injection.