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## TECHNICAL DATA SHEET

### MICROCENE MC181

A second generation, metallocene medium density polyethylene, with Hexene as co-monomer, suitable for rotational moulded items requiring superior mechanical properties. Outstanding process and product benefits result from using polymers of narrow molecular weight distribution and low viscosity at zero shear rates.

#### REDUCED CYCLE TIME

Faster fusion, compacting and crystallisation allows for reduced cycle times or lower oven temperatures.

#### REDUCED WEIGHT / BETTER DISTRIBUTION

Improved wall thickness control resulting from Microcene's excellent flow properties holds out the prospect of weight reduction.

#### BROADER PROCESSING CHARACTERISTICS

Less variation in colour and impact properties at different cycle times is particularly helpful to the moulder running a range of tools on multi-arm machines. Consistency of impact performance on 'under-cooked' or 'overcooked' parts of the same moulding is another benefit of Metallocene technology.

#### IMPROVED MECHANICAL PROPERTIES

The narrower molecular weight distribution compared to other linear copolymers gives improved impact resistance, lower warpage, better creep resistance and better definition / smoothness of inner and outer surface finishes.

This grade is available in a full range of colours, flame retardancy, UV and antistatic protection levels.

PHYSICAL PROPERTY	TEST METHOD	UNITS	VALUE
Melt Flow Index (190/2.16)	ISO 1133	g/10min	6.0
Density	ISO 1183	g/cm <sup>3</sup>	0.935
Tensile Strength at Yield (50 mm/min)	ISO 527	MPa	18
Elongation at Break	ISO 527	%	>700
Flexural Modulus (5mm/min)	ISO 178	MPa	700
Melting Point	ISO 11357	°C	123
Vicat Softening Point	ISO 306	°C	121

The specialised shape and distribution of this Metallocene powder has been developed through direct experience of the Rotational Moulding process

***The information given above is typical for the material. It should only be used for the purpose of comparison and does not guarantee performance under end use conditions.***



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