

Polypropylene Random-Copolymer

Description:

This polypropylene random copolymer has a high molecular weight with special designed properties require for high demanding pipes. This grade is highly heat stabilised and especially formulated for extraction resistance. This grade with long service life is used for the manufacturing of cold and hot water pipes and fittings for transport of drinking water. It complies with German regulations for materials in contact with water intended for human consumption (BGA requirements and KTW recommendations).

Health, Safety and Food Contact regulations:

Material Safety Data Sheets (MSDS) for DSM products are available upon request from your DSM Sales representative. Always consult the MSDS sheet for the product you consider using.

Properties	Units SI	Typical Values	Testmethods
Specific properties			
Density:	<i>kg/m³</i>	898	ISO 1183
Melt flow index:			ISO 1133
at 230 °C and 2.16 kg	<i>g/10min</i>	0.3	
at 190 °C and 5 kg	<i>g/10min</i>	0.5	
Mechanical properties 1)			
Charpy impact strength:			ISO 179
unnotched, at +23 °C	<i>kJ/m²</i>	>60	
notched, at +23 °C	<i>kJ/m²</i>	30	
notched, at + 0 °C	<i>kJ/m²</i>		
notched, at - 20 °C	<i>kJ/m²</i>		
Izod impact strength:	2)		
notched, at +23 °C	<i>kJ/m²</i>	15	ISO 180
notched, at + 0 °C	<i>kJ/m²</i>		
notched, at -20 °C	<i>kJ/m²</i>		
Tensile test:	3)		ISO 37
tensile stress at yield	<i>N/mm²</i>	27	
tensile strength at break	<i>N/mm²</i>	32	
elongation at break	<i>%</i>	>50	
Flexural test:	4)		ASTM D790
flexural modulus	<i>N/mm²</i>	900	
Thermal properties			
Vicat softening temperature:			
at 10 N	°C	130	ISO 306/A
at 50 N	°C	61	ISO 306/B

Notes

- 1) Determined at injection moulded test specimen. 3) Testspeed 50 mm/min, test specimen 2.0 mm thick.
 2) With V shape notch 0.25 mm. 4) Three point bending.

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