



# FHR Polypropylene P5M6K-048

Flint Hills Resources, LP - Polypropylene Random Copolymer

Wednesday, December 8, 2021

## General Information

### Product Description

DESCRIPTION: Random copolymer for injection molding.

FEATURES: Clarified. Produced without animal derived components or phthalates.

APPLICATIONS: Consumer and healthcare products.

### General

Material Status	• Commercial: Active		
Regional Availability	• Europe	• North America	
Additive	• Clarifier		
Features	• High Clarity	• No Animal Derived Components • Random Copolymer	
Uses	• Consumer Applications	• Medical/Healthcare Applications	
Agency Ratings	• DMF	• USP 88	
	• FDA 21 CFR 177.1520(c) 3.1a	• USP Class VI	
RoHS Compliance	• Contact Manufacturer		
Forms	• Pellets		
Processing Method	• Injection Molding		

## ASTM & ISO Properties <sup>1</sup>

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density	0.900 g/cm <sup>3</sup>	0.900 g/cm <sup>3</sup>	ASTM D1505
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	35 g/10 min	35 g/10 min	ASTM D1238
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Strength (Yield)	3930 psi	27.1 MPa	ASTM D638
Tensile Elongation (Yield)	11 %	11 %	ASTM D638
Flexural Modulus - Tangent	152000 psi	1050 MPa	ASTM D790
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact (73°F (23°C))	1.2 ft·lb/in	63 J/m	ASTM D256
Gardner Impact (73°F (23°C))	> 320 in·lb	> 36.2 J	ASTM D5420
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Rockwell Hardness (R-Scale)	90	90	ASTM D785
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load 66 psi (0.45 MPa), Unannealed	183 °F	84.0 °C	ASTM D648
Peak Melting Temperature	293 to 306 °F	145 to 152 °C	ASTM D3418
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating	HB	HB	UL 94
Optical	Typical Value (English)	Typical Value (SI)	Test Method
Haze (25.00 mil (635 µm))	6.00 %	6.00 %	ASTM D1003

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### Additional Information

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Notice regarding medical applications:

This Flint Hills product meets certain requirements for use in medical applications. It is the responsibility of the medical device or pharmaceutical manufacturer to determine that this Flint Hills product is safe, lawful and technically suitable for the intended use. Flint Hills encourages its customers to review their application with a Flint Hills technical representative to ensure that this product is not used in ways for which it was not intended. Flint Hills makes no warranties (express or implied), promises or guarantees concerning the suitability of this product for use in any given medical application.

### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.