

【Inquiries】

AsahiKASEI Engineering Plastics Information Comprehensive Site

URL : <https://www.asahi-kasei-plastics.com/en/contact/>

AsahiKASEI



DELPET™ FILA82

Asahi Kasei Corporation - Polymethyl Methacrylate Acrylic

Tuesday, February 27, 2024

General Information

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Asia Pacific • Europe
Uses	• Filters
Forms	• Pellets

ASTM & ISO Properties¹

Physical	Nominal Value	Unit	Test Method
Density	1.19	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/3.8 kg)	8.0	g/10 min	ISO 1133
Spiral Flow ^{2, 3}	38.0	cm	Internal Method
Molding Shrinkage	0.20 to 0.60	%	Internal Method
Water Absorption (Equilibrium, 23°C, 50% RH)	0.30	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	3300	MPa	ISO 527-1/1A/1
Tensile Stress (Break)	72.0	MPa	ISO 527-2/1A/5
Tensile Strain (Break)	5.0	%	ISO 527-2/1A/5
Flexural Modulus	3300	MPa	ISO 178
Flexural Stress	120	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength	1.3	kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength	20	kJ/m ²	ISO 179/1eU
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (M-Scale)	95		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Vicat Softening Temperature	98.0	°C	ISO 306/B50
Heat Deflection Temperature	91	°C	ISO 75-2

Notes

¹ Typical properties: these are not to be construed as specifications.² Mold Temperature: 60°C, Melt Temperature: 250°C, Injection Pressure: 750 bar³ Thickness : 2mm

Disclaimer:

- Data shown are typical values obtained by proper testing methods and should not be used for specification purpose. Please use these data for selecting the most appropriate grade suitable for specific usage.

These data may be changed because of improvement in properties.

- Be sure to read the relevant SDS before handling and use, and always follow the Important Precautions.

- Do not use plastics in any of the following orally- or medically-related applications.

- Orally-related applications: any part, device or component which may come into direct oral contact or into direct contact with drinking foods or beverages.

For drinking water application, please consult Asahi Kasei Corporation.

- Medically-related applications: any part, device or component which may be used intracorporeally or which may in dialysis or other processes come into direct or indirect contact with body tissue, body fluids or transfusion fluids.