Product Data Sheet

SECCO K4912M



Polypropylene, Random Copolymer

Product Description

K4912M is a nucleated polypropylene random copolymer with outstanding performances such as excellent clarity, high gloss and anti-precipitation, the biological and chemical properties of which comply with YY/T 0242-2007 Polypropylene material for manufacture of infusion, transfusion and injection equipment for medical use. K4912M is widely used in medical area and various upscale transparent products.

Typical Applications

Injection Molding: medical products, transparent containers, houseware, food packaging bottles, media packaging products, household appliances

Typical Property Values

Properties	Typical values	Units	Test methods
Physical Properties			
Melt Flow Rate (230°C/2.16 kg)	12.5	g/10min	GB/T 3682.1
Density	0.90	g/cm ³	GB/T 1033.2
Melting Temperature (DSC)	144	${\mathbb C}$	GB/T 19466.3
Mechanical Properties			
Tensile Strength at Yield (50 mm/min)	28	MPa	GB/T 1040.2
Tensile Strength at Break (50 mm/min)	15	MPa	GB/T 1040.2
Tensile Elongation at Break (50 mm/min)	400	%	GB/T 1040.2
Flexural Modulus (2 mm/min)	1050	MPa	GB/T 9341
Charpy Impact Strength, notched (23℃)	6.0	kJ/m²	GB/T 1043.1
Rockwell Hardness	101	R-Scale	GB/T 3398.2
Optical Properties			
Transmittance (1mm sheet)	87	%	GB/T 2410
Haze (1mm sheet)	14	%	GB/T 2410
Yellow Index	-5	/	ASTM E313
Thermal Properties			
Heat Deflection Temperature (0.45 MPa)	73	$^{\circ}$	GB/T 1634.2
Vicat Softening Point (A ₅₀)	121	$^{\circ}\!$	GB/T 1633

Disclaimer: All information provided in this document, whether it is data, typical applications, product features, etc., is put forward on the basis of research results and is believed to be reliable; However, it is not a guarantee for this product. Users and other users should make their own judgments on whether this product and the contents listed in this document are suitable for its specific use, and be responsible for the risks, results and impacts generated, and ensure that its disposal complies with relevant regulations and other government regulations. Under no circumstances will SECCO be responsible for any consequences arising from the use of the above information or the application and processing of this product.

Notes

- * These are typical properties only and should not be construed as specifications
- * Recommended processing temperature: 190 ~ 250 °C
- * The information in this document was published in November 2022. When an updated version is released, the previous version of the same grade is automatically invalid

Product Compliance

K4912M complies with GB 4806.6-2016 *National Food Safety Standard-Plastic Resin used in Food-contact*, FDA regulation 21 CFR 177.1520(c) 3.1a and the RoHS Directive 2011/65/EU. Additives those do not comply with national regulations, such as phthalates, are not intentionally used in **K4912M**. However, the customer is still responsible for determining whether the fabricated product is in compliance with applicable laws and regulations.

Storage

The storage area for polypropylene resin should be dry, and preferable to normal temperature. The resin must be protected from direct sunlight, and heat resource. SECCO would not give warranty to bad storage conditions which may lead to color change, bad odor and inadequate product performance. It is generally recommended to convert all materials latest within 6 months from the date of delivery.

Safety and Material Handling

SECCO polypropylene resin has a very low degree of toxicity under normal conditions of use. For more detailed information, please contact your SECCO representative or the local suppliers to get the Material Safety Data Sheet (MSDS) for Copolymer Polypropylene.

For additional technical and sales assistance, please contact

Shanghai SECCO Petrochemical Co., Ltd

Registered address: NO. 557 South Nanyinhe Road, Shanghai Chemical Industrial Park

Contact Address: 30F, A Building, Fareast International Plaza, No. 319, Xianxia Rd., Changning District, Shanghai

Tel: +86(0)21 5257 4688 Fax: +86(0)21 6209 7070 Website: www.secco.com.cn

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