

Cyclic Olefin Copolymer (COC)

TOPAS®

5013L-10

High Flow

POLYPLASTICS CO., LTD.

General Properties of 5013L-10

table1-1 General Properties (ISO)

Item	Unit	Test Method	High Flow
			5013L-10
			General Purpose for Injection Molding
Color			-
ISO(JIS)quality-of-the-material display:		ISO11469 (JIS K6999)	>COC<
Density	kg/m ³	ISO 1183	1,020
Water absorption (23°C, sat.)	%	ISO 62	0.01
MVR (260°C, 2.16kg)	cm ³ /10min	ISO 1133	48
Tensile modulus (1mm/min)	MPa	ISO 527-2/1A	3,200
Tensile stress at break (5mm/min)	MPa	ISO 527-2/1A	46
Tensile strain at break (5mm/min)	%	ISO 527-2/1A	1.7
Charpy impact strength (unnotched)	kJ/m ²	ISO 179/1eU	13
Charpy notched impact strength (23°C)	kJ/m ²	ISO 179/1eA	1.6
Glass transition temperature (10°C/min)	°C	ISO 11357-1,-2,-3	134
Temperature of deflection under load (0.45MPa)	°C	ISO 75-1,2	127
Vicat softening temperature (50°C/h 50N)	°C	ISO 306	133
Volume resistivity	Ω·cm	IEC 60093	1 × 10 ¹⁴ <
Relative permittivity (1-10kHz)		IEC 60250	2.35
Tracking resistance (CTI)	V	IEC 60112	600<
Light transmittance (2mmt)	%	ISO 13468-1	91.4
Refractive index		ISO 489	1.533
Flammability		UL94	HB
The yellow card File No.			E177491
Appropriate List number of Ministerial Ordinance for Export Trade Control			-

All figures in the table are the typical values of the material and not the minimum values of the material specifications.

NOTES TO USERS

- All property values shown in this brochure are the typical values obtained under conditions prescribed by applicable standards and test methods.
- This brochure has been prepared based on our own experiences and laboratory test data, and therefore all data shown here are not always applicable to parts used under different conditions. We do not guarantee that these data are directly applicable to the application conditions of users and we ask each user to make his own decision on the application.
- It is the users' responsibility to investigate patent rights, service life and potentiality of applications introduced in this brochure. Materials we supply are not intended for the implant applications in the medical and dental fields, and therefore are not recommended for such uses.
- For all works done properly, it is advised to refer to appropriate technical catalogs for specific material processing.
- For safe handling of materials we supply, it is advised to refer to the Safety Data Sheet "SDS" of the proper material.
- This brochure is edited based on reference literature, information and data available to us at the time of creation. The contents of this brochure are subject to change without notice upon achievement of new data.
- Please contact our office for any questions about products we supply, descriptive literatures or any description in this brochure.

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