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# POM | KEPITAL F25-03H | High-stiffness grade

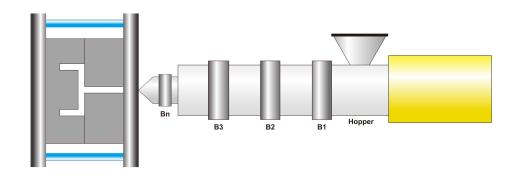
- A stiffness-improved(medium-viscosity) grade for general injection molding.
- It has a high stiffness compared to general POM copolymer.

Diam'rel announced a	Tr4 C4 1 1	TT 24	<b>X</b> 7-1
Physical properties	Test Standard	Unit	Value
Density	ISO 1183	g/cm <sup>3</sup>	1.41
Melt flow rate	ISO 1133	g/10min	13
Water absorption(23 °C, 50 %RH)	ISO 62	%	0.2
Thermal properties	Test Standard	Unit	Value
Heat deflection temperature(1.8 MPa)	ISO 75	°C	101
Flammability	UL 94	_	НВ
Melting point(10 °C/min)	ISO 11357	°C	168
Coefficient of linear thermal expansion	ISO 11359	X 10 <sup>-5</sup> /°C	12
Mechanical properties	Test Standard	Unit	Value
Tensile modulus	ISO 527	MPa	2,850
Tensile strength	ISO 527	MPa	68
Tensile strain at yield	ISO 527	%	10
Strain at break	ISO 527	%	32
Flexural strength	ISO 178	MPa	94
Flexural modulus	ISO 178	MPa	2,800
Charpy impact strength(Notched) @ 23°C	ISO 179/1eA	kJ/m <sup>2</sup>	6.5
Charpy impact strength(Notched) @ -30°C	ISO 179/1eA	kJ/m <sup>2</sup>	6.0
Electrical properties	Test Standard	Unit	Value
Surface resistivity	IEC 60093	Ω	1x10 <sup>16</sup>
Volume resistivity	IEC 60093	Ω/ cm	$1x10^{14}$
Dielectric strength	IEC 60243-1	kV/mm	19
Other	Test Standard	Unit	Value
Mold shrinkage(flow direction, $\Phi = 100 \text{ mm}$ , $t = 3 \text{ mm}$ )	KEP Method	%	2.0
General information	Test Standard	Unit	Value
Polymer abbreviation	ISO 1043	<u>-</u>	POM

Revision No: 3 (2016-10-01)



### Injection molding condition



# Pre-drying (Suggested max. moisture: 0.1%)

It is recommend to dry material at 80°C ~ 100°C(176°F ~ 212°F) for 3 h ~ 4 h if necessary.

## **Temperature**

Mold temperature :  $60 \,^{\circ}\text{C} \sim 80 \,^{\circ}\text{C}(140 \,^{\circ}\text{F} \sim 176 \,^{\circ}\text{F})$ Barrel temperature :  $170 \,^{\circ}\text{C} \sim 210 \,^{\circ}\text{C}(338 \,^{\circ}\text{F} \sim 410 \,^{\circ}\text{F})$ 

Mold	Bn(Nozzle)	B3(Metering)	B2(Compression)	B1(Feeding)	Hopper
60 ~ 80 °C	180 ~ 210 °C	190 ~ 200 °C	180 ~ 190 °C	170 ~ 180 °C	60 ~ 80 °C
140 ~ 176 °F	356 ~ 410 °F	374 ~ 392 °F	356 ~ 374 °F	338 ~ 356 °F	140 ~ 176 °F

### **Plastification**

Screw speed: 150 mm/s ~ 200 mm/s Back pressure: Maximum 20 bar

# **Contact information**

## Headquarters

Mapo-daero 119 (Gongdeok-dong), Mapo-gu, Seoul, Korea Tel 82-2-707-6840 ~ 8, Telefax 82-2-714-9235

# **KEP Europe GmbH**

Rheingaustrasse 190-196 D-65203 Wiesbaden Germany Tel +49(0) 611 962-7381, Telefax +49 (0)611 962-9132

### **KEP Americas**

106 North Denton Tap Road Suite 210-202 Coppell, TX 75019, USA

Tel +1 888 KEPITAL, Telefax +1 888 537-3291

## **KEP China**

A1905, HongQiao Nanfeng Plaza, 100 Zunyi Road, Shanghai, China

Print Date: 2017-10-31

Tel +86 21 6237-1972, Telefax +86 21 6237-1803

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