

Through continuous innovation and new value creation, KEP will be the premier chemical company providing humanity with solutions for a better future.

# KEPITAL<sup>®</sup> M-Series

June 28, 2017

- **Key features**

- High stiffness and good resilience
- Good sliding performance
- Excellent long-term dimensional stability
- High resistance to chemicals
- Low formaldehyde emission controlled by less than 10 mg/kg

- **Food contact compliance**

- Requirements of Code of Federal Regulation of FDA Title21 177.2470 for "Polyoxymethylene copolymer"
- Monomers and additives listed in EU 10/2011

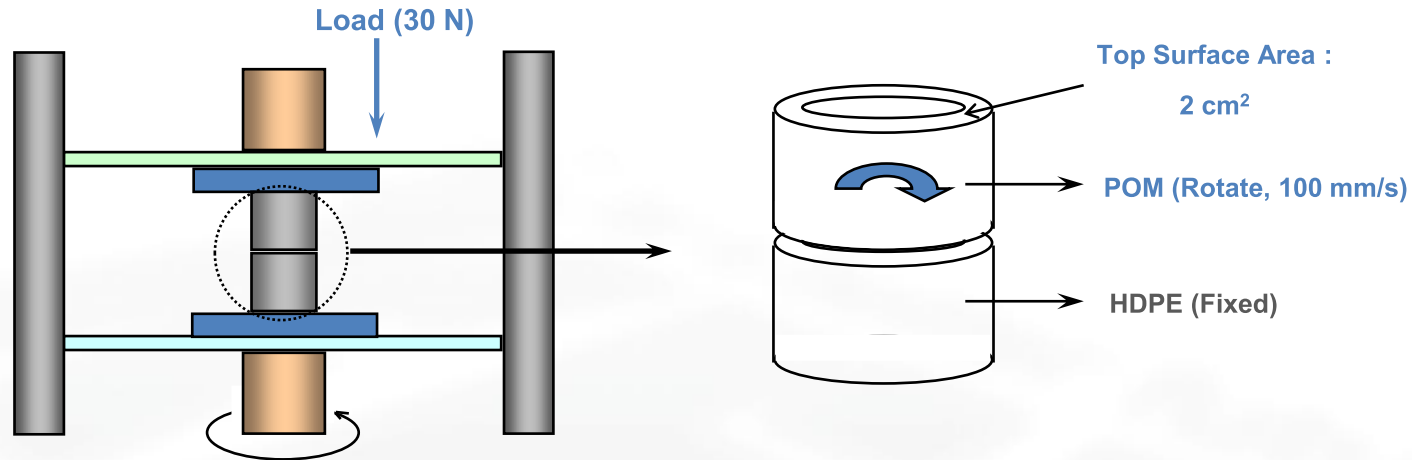
- **Common regulations for restriction of substance**

- "Substance of Very High Concern under REACH EC 1907/2006"
- "EU Decision 2001/2/EC : TSE, BSE, No Animal origin"
- "Phthalates, Latex, Bisphenol A"

# General Properties of M-Series

Item	Method	Unit	F20-03M	F25-03M	F30-03M
Melt Index	ISO 1183	g/10min	9	13	28
Tensile Modulus	ISO 527	MPa	2750	2750	2850
Tensile Strength	ISO 527	MPa	65	65	65
Tensile Strain at Yield	ISO 527	%	10	9	8
Nominal Strain at Break	ISO 527	%	35	33	25
Flexural Strength	ISO 178	MPa	87	90	90
Flexural Modulus	ISO 178	MPa	2550	2650	2700
Charpy Notched Impact Strength	ISO 179	kJ/m <sup>2</sup>	6.5	6.0	5.5
Formaldehyde emission	VDA275	mg/kg	≤10	≤10	≤10

# Sliding Properties of M-Series



Sample	Dynamic Friction Coefficient	Noise
F25-03 vs. HDPE	0.25	Not occurred
F25-03M vs. HDPE	0.26	Not occurred

\* Test method : Load 30 N, Speed 100 mm/s, 2 h at 23 °C

- There is no significant friction property difference between both materials.  
(KEPITAL F25-03/F25-03M)

### **Properties are subject to change with a new knowledge and development**

Although the information and recommendations set forth herein are presented in good faith and believed to be correct, we recommend that persons receiving information must make their own determination as to its suitability to their purposes prior to use. The information is based on natural colored products only through relevant test methods and conditions. It is the obligation of the customer to determine whether a particular material and part design is suitable for a particular application. The customer is responsible for evaluating the performance of all parts containing plastics prior to their commercialization. KOREA ENGINEERING PLASTICS CO., LTD. and KEP Europe GmbH assume no warranty or liability of, express or imply, as to the accuracy or completeness thereof, or any other nature regarding designs, products, or information may be used without infringing the intellectual property rights of others. Further, the data furnished by KEP are not intent to replace any testing required to determine a suitability of any application and set a specification limit for design.