

## Kolon Kocetal® VT701 Modified Grade Acetal Copolymer (discontinued \*\*)

Category: Polymer, Thermoplastic, Acetal (POM), Acetal Copolymer, Unreinforced

## **Material Notes:**

Thermal properties: Kocetal has excellent heat stability; heat degradation is little under long term and high temperature application, compared to other POM. Maximum applicable temperature of products of Kocetal are short term: 140-150C and long term: 100-120C. Mechanical Properties: Kocetal is an engineering plastic that has excellent strength, stiffness and wear endurance. Also, it offers an excellent balance of several properties. For example, mechanical properties are stable in the practical temperature zone (-50C to 80C), compared to Nylon and PBT resins. Although it has slightly lower initial strength, compared to homopolymer, the long term properties of "elongation at break and impact strength" are superior. Electrical Properties: Kocetal has excellent electrical properties. Its electrical properties, volume resistivity, dielectric constant, dissipation factor and dielectric strength change little with temperature. It also has a feature of good anti-pollution properties on electrical contact. Kocetal has such a permanent anti-static grade that can be applied to the specifics. Chemical Properties: Kocetal has excellent chemical resistance to organic chemicals, oils, fats and detergents. It is also strongly resistant to inorganic chemicals except strong acids. Information provided by US distributor, API-Kolon.

## Order this product through the following link:

http://www.lookpolymers.com/polymer\_Kolon-Kocetal-VT701-Modified-Grade-Acetal-Copolymer-nbspdiscontinued-.php

Physical Properties	Metric	English	Comments
Density	1.41 g/cc	0.0509 lb/in³	ASTM D790
Water Absorption	0.22 %	0.22 %	ASTM D570
Linear Mold Shrinkage	0.020 cm/cm	0.020 in/in	ASTM D955
Melt Flow	30 g/10 min	30 g/10 min	ASTM D1238

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell M	80	80	ASTM D785
Tensile Strength, Ultimate	61.8 MPa	8960 psi	ASTM D638
Elongation at Break	40 %	40 %	ASTM D638
Flexural Yield Strength	90.2 MPa	13100 psi	ASTM D790
Flexural Modulus	2.55 GPa	370 ksi	ASTM D790
Izod Impact, Notched	0.588 J/cm	1.10 ft-lb/in	ASTM D256

Thermal Properties	Metric	English	Comments
CTE, linear	110 - 130 μm/m-°C	61.1 - 72.2 µin/in-°F	ASTM D696
	@Temperature 20.0 °C	@Temperature 68.0 °F	
Melting Point	166 °C	331 °F	ASTM D1525



Thermal Properties emperature, Air	Metric 20 °C	English <sub>t8</sub> •F	Comments
	140 - 150 °C	284 - 302 °F	Short Term
Deflection Temperature at 0.46 MPa (66 psi)	160 °C	320 °F	ASTM D648
Deflection Temperature at 1.8 MPa (264 psi)	110 °C	230 °F	ASTM D648
Flammability, UL94	НВ	НВ	

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+12 ohm-cm	1.00e+12 ohm-cm	ASTM D257
Surface Resistance	1.00e+13 ohm	1.00e+13 ohm	ASTM D257
Dielectric Constant	3.7	3.7	ASTM D150
	@Frequency 1e+6 Hz	@Frequency 1e+6 Hz	
Dielectric Strength	19.0 kV/mm	483 kV/in	ASTM D149
Dissipation Factor	0.0060	0.0060	ASTM D150
	@Frequency 1e+6 Hz	@Frequency 1e+6 Hz	
Arc Resistance	>= 200 sec	>= 200 sec	ASTM D495

## **Contact Songhan Plastic Technology Co.,Ltd.**

Website: www.lookpolymers.com Email: sales@lookpolymers.com

Tel: +86 021-51131842 Mobile: +86 13061808058

Skype: lookpolymers

Address: United North Road 215, Fengxian District, Shanghai City, China