

## TIMCAL TIMREX® KS44 Primary Synthetic Graphite

Category : Carbon , Graphite , Other Engineering Material , Additive/Filler for Polymer

### Material Notes:

TIMREX Primary Synthetic Graphite is produced in a unique highly controlled graphitization process which assures narrow specifications and unequalled consistent quality due to: monitoring of all production and processing stages, strict final inspection, and clearly defined development processes. TIMREX Primary Synthetic Graphite shows unique properties thanks to the combination of a consistent purity, perfect crystalline structure and well defined texture. Tribological and mechanical properties: Medium toughness Good lubrication properties Advantages and applications: Low friction coefficient Low wear of the counterpart Good transfer-film formation High electrical conductivity Suitable for pitch-bonded and resin-bonded brushes Special alloys (Al, Mg, Ti) Hard metals (WC, TiC, Mixed Carbides) HSS Fe-sintered engineering parts Fe-self lubricating engineering parts Fe-friction parts Copper/bronze bearings Information provided by TIMCAL

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_TIMCAL-TIMREX-KS44-Primary-Synthetic-Graphite.php](http://www.lookpolymers.com/polymer_TIMCAL-TIMREX-KS44-Primary-Synthetic-Graphite.php)

Physical Properties	Metric	English	Comments
Bulk Density	0.190 g/cc	0.00686 lb/in <sup>3</sup>	Scott, Typical
Particle Size	5.0 µm	5.0 µm	at a density of 1.81 g/cc, pressure 2.5 t/cc
	5.0 µm	5.0 µm	Springback 11.5%, pressure 0.477 t/cc
	13 µm	13 µm	at a density of 1.90 g/cc, pressure 2.5 t/cc
	18.6 µm	18.6 µm	d50
	20 µm	20 µm	Springback 13%, pressure 0.477 t/cc
	45 µm	45 µm	at a density of 1.85 g/cc, pressure 2.5 t/cc
	45.4 µm	45.4 µm	d90, Typical
	40 - 51.5 µm	40 - 51.5 µm	d90, Guaranteed
	75 µm	75 µm	Springback 17%, pressure 0.477 t/cc
Specific Surface Area	75 µm	75 µm	at a density of 1.73 g/cc, pressure 2.5 t/cc
	9.0 m <sup>2</sup> /g	9.0 m <sup>2</sup> /g	BET
	0.060 %	0.060 %	Typical
Ash	<= 0.10 %	<= 0.10 %	Guaranteed

Mechanical Properties	Metric	English	Comments
	0.25	0.25	Friction coefficient of sintered Cu-C -

Mechanical Properties	Metric	English	Comments
	@ Temperature 850 °C, Time 10800 sec	@ Temperature 1560 °F, Time 3.00 hour	brake pads with 10% TIMREX® KS graphite as a function of the particle size, Sinterdensity: 55% of the theoret. density

Electrical Properties	Metric	English	Comments
Electrical Resistivity	1.55 ohm-cm	1.55 ohm-cm	particle size 80 um, pressure 2.5 t/cc
	1.60 ohm-cm	1.60 ohm-cm	particle size 142 um, pressure 2.5 t/cc
	1.80 ohm-cm	1.80 ohm-cm	particle size 15 um, pressure 2.5 t/cc
	2.25 ohm-cm	2.25 ohm-cm	particle size 10 um, pressure 2.5 t/cc
	150 ohm-cm	150 ohm-cm	8% graphite
	200 ohm-cm	200 ohm-cm	6.8% graphite
	400 ohm-cm	400 ohm-cm	5.5% graphite
	800 ohm-cm	800 ohm-cm	4.5% graphite

Processing Properties	Metric	English	Comments
Moisture Content	0.10 %	0.10 %	Typical
	<= 0.50 %	<= 0.50 %	Guaranteed

Descriptive Properties	Value	Comments
Crystallite Height	>100 nm	
Flexural Strength	6 N	4.5% graphite
	6.5 N	5.5% graphite
	7 N	6.5% graphite
	7.5 N	7.9% graphite

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

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