

NBK America LLC

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Date: April, 2024

Material Change of Plastic Screw SPEG-C

Dear Valued Customer,

We hope you are doing well and appreciate your constant business support of NBK.

Toward ongoing green procurement, the material of our Plastic Screws (PEEK GF30 / Hex Socket Head Cap Screws) SPEG-C is to be changed.

[Applicable Products]

• Plastic Screws (PEEK GF30 / Hex Socket Head Cap Screws) SPEG-C Series

[Change Effective Period]

The changes will take place for orders shipped on June 3, 2024 (Monday) and thereafter.

Note that we do not offer returns/exchanges as a result of this change.

[Details of Change]

In accordance with the material change, some physical property values will change likewise. In addition, the change will not affect the PEEK GF30 main body material (PEEK Containing Glass Fiber/Light Brown/Glass Fiber 30%).



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■ Physical Property Values

Property	Test Method	Measurement	Unit	Before	After
		Conditions		Change	Change
Tensile Strength	ISO 527	23°C 50% Rh	N/mm²	168	165
Tensile Elongation	ISO 527	23°C 50% Rh	%	2.1	2.0
Tensile Modulus	ISO 527	23°C 50% Rh	N/mm²	11	11
Bending Strength	ISO 527	23°C 50% Rh	N/mm²	259	250
Flexural Modulus	ISO 527	23°C 50% Rh	GPa	11.5	12.2
Charpy Impact Strength (with	ISO 179/1Ea	23°C 50% Rh	kj/m²	8C	9C
Notch)					
Flammability UL94 (1.6mm)	IEC 60695	_	_	V-0	V-0
Heat Distortion Temperature	ISO 75	Dry	°C	327	323
(1.8N/mm ²)					
Dielectric Constant (1MHz)	IEC 60250	_	_	3.8	3.3
Dielectric Loss Tangent (1MHz)	IEC 60250	_	_	0.007	0.004
Volume Resistivity	IEC 60093	_	Ω·m	10^13	10^13
Density	ISO 1183	_	g/cm³	1.52	1.5
Water Absorption*1	ISO62	Before Change	%	0.05	0.4
		23°C in water x 24h			
		After Change			
		23°C in water x saturation			
Glass Fiber Content	-	_	%	30	30

^{*}Values in chart are for reference only. They are not guaranteed values.

Please do not hesitate to contact us at <u>info.us@nbk1560.com</u>, if you have any questions.

Sincerely yours, Hiroki Goto Engineering Manager NBK America LLC 307 East Church Road, Suite 7, King of Prussia, PA 19406

^{*1:} Test times differ before and after the change; the pre-change value is for 24 hours' immersion and the post-change value for saturation.



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