# **NYSTEIN Thermal Gel Flextein® TG845NS**

## Technical Data Sheet

### **Product Description:**

Flextein TG845NS is a high performance fluidic thermally conductive interface material for silicone-sensitive applications, suitable for heat dissipation modules or components with wide variations in thickness. Its inherent adhesive properties eliminate the need for a bonding layer, while its good wetting properties improve heat transfer efficiency by allowing full contact with mating components. It does not need to be die-cut and can be directly dispensed between the heat generating device and the heat sink/shell, which can replace the thermal conductive gasket to improve the thermal conductivity and reduce the cost.

Unlike thermally conductive silicone grease, Flextein TG845NS thermally conductive gel is non-settling and non-flowing and is suitable for dispensing equipment, screen printing or squeegee application.

#### **Features & Benefits:**

- Thermal conductivity 4.5 W/m· K
- Silicone-free, for silicone-sensitive applications
- High weather resistance and reliability
- Easy dispensing, good malleability
- Perfect blend of very low stress and low thermal resistance



## **Typical Property Data:**

Property	Unit	Parameter	Test Method
Appearance		Off-white	Visual
Min. Used Thickness	mm	0.15	ASTM D374
Extrusion rate	g/min	35	Nystein
Thermal Conductivity	W/m · K	4.5	ISO 22007-2
Density	g/cm³	3.2	ASTM D792
Thermal Resistance	@50 psi, °C∙in²/W	0.143	ASTM D5470
Dielectric Strength	kV/mm	≥6.0	ASTM D149
Volume Resistivity	Ω·cm	≥ 1.0 × 10 <sup>12</sup>	ASTM D257
Service Temp	°C	-40 to 110	Nystein
Flame Rating		V-0	94 UL
RoHS		Yes	Nystein



#### **Typical Application:**

- Consumer electronics, communication equipment
- Tablet, multimedia devices
- Desktop, portable computer and server
- LED lighting devices
- Printed circuit board assemblies, housing connections
- Fiber optic communication equipment
- Automotive electronics
- Fragile/fragile components, housing connections
- Military electronics

#### **Configuration Available:**

- 30cc, 55cc, 300cc Syringe.
- 1kg, 10kg pail.

### **Storage conditions:**

- Sealed at room temperature away from light, and stored in a dry place.
- Best Storage conditions: Temperature: 25°C (±3), Humidity: 50% (±10), can be stored for 12 months.
- The materials taken out after opening may be contaminated during use, so please do notmix contaminated products with unopened products. Nystein assumes no responsibily for contaminated products or conditions other than the required storage conditions.
- For additional information, please contact your appropriate sales, technical support, orcustomer service representative promptly.

#### **Declare**

The information provided in this Technical Data Sheet (TDS), including product use and application recommendations, is based on our knowledge and experience with Nystein China products. The data contained in this TDS is for informational purposes only and is believed to be reliable. To obtain official product specifications for a specific product end use, please contact the sales, Application Engineer or customer service person with whom you are in contact.

We are not responsible for results obtained by others using methods beyond our control. This product may have a variety of applications and different operating conditions in your environment that are beyond our control. Therefore, Nystein China assumes no responsibility for the suitability of our products for the processes and conditions under which you will use them and for the intended applications and results. We strongly recommend that you conduct tests to confirm the suitability of our products prior to their use.

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