

## NanoFLON® Series

Sub-Micron Polytetrafluoroethylene Powder

Shamrock's NanoFLON® Series consists of nano-sized PTFE powder. NanoFLON® makes it easier to add key fluoropolymer properties to your product, including slip, abrasion resistance and release. The ultra-fine powders are engineered using our own proprietary process that allows easy dispersion and primary particle sizes as small as 200 nanometers.

### Product Description:

NanoFLON® Series powders are virgin PTFE micropowder with various agglomerated particle sizes.

### Application:

NanoFLON® Series Powders are designed for thermoplastics and elastomers to reduce friction and enhance anti-wear properties. NanoFLON® Powders can be dispersed into submicron primary particle size.

NanoFLON® Series Powders can be compounded into polyesters, polyamides, polyacetals, polystyrene, polycarbonate, and other engineering plastics. NanoFLON® is also effective in elastomers and blends of various engineering plastics.

**Recommended Level:** 5 - 20% of Total Formula Weight

### Features and Benefits:

- ✿ Reduces Friction
- ✿ Thin Film Applications
- ✿ Enhances Wear Resistance
- ✿ Micromolding Applications
- ✿ Reduce Noise
- ✿ High Surface Area

Typical Properties	Method	NanoFLON® 114T	NanoFLON® 119N	NanoFLON® 160N
Particle Size Mean Value	ASTM D-4464	4-8 µm	4-8 µm	5-8 µm
90% of Particles Under	ASTM D-4464	12 µm	12 µm	13 µm
Primary Particle Size	SEM	0.2 µm	0.2 µm	0.2 µm
Melting Point	ASTM D-4591	> 321°C	> 320°C	> 321°C
Specific Gravity	ASTM D-2320	2.15-2.2 g/cm³	2.15-2.2 g/cm³	2.2 g/cm³
Bulk Density	ASTM D-4894/4895	200-350 g/l	250-450 g/l	250-450 g/l
Surface Area	ASTM D-5675	6.0-8.0 m²/g	7.0-9.0 m²/g	11.0-13.0 m²/g
Appearance	Visual	White	White	White

**Regulatory Status:** The components of these products are listed on multiple chemical inventories. For specific information on the applicable chemical inventories, please refer to the product SDS.

**Safety, Shipping and Handling:** For complete safety, shipping and handling information please contact your regional Customer Service Representative, or our Customer Service Team at customerserviceteam@shamrocktechnologies.com. For **more** information about Shamrock's other products or capabilities please visit us at our website, ShamrockTechnologies.com.

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