

SOLUTIONS FOR THERMAL STABILITY



MAXIMIZING THE PERFORMANCE OF PLASTIC

through innovative additive solutions



Polyad® Fahrenheit™ Series enables superior high temperature thermal stability for the most demanding applications. Tensile retention up to 2000 hours at 150°C (PA 6) and up to 5000 hours at 180°C (GF PPA).

#### Fahrenheit<sup>™</sup> Therma

High performance thermal stability

Ideal for automotive under-the-hood applications and black and glass filled systems

Enables tensile retention of 2000 hours at 150°C (PA 6) and 5000 hours at 180°C (GF PPA)

#### **Fahrenheit Therma Plus**

High performance thermal stability with **excellent dispersion**, processing, and surface character

Ideal for automotive interior, wire and cable, fiber, and film applications.



#### **Fahrenheit™ Fura**

Excels in performance for filled polyamide applications

Offers equivalent thermal stability to PolyAd® Fahrenheit Therma solutions

Boasts increased melt solubility and enables high loadings of stabilizer



## **Fahrenheit Fura Plus**PolyAd's premier heat stabilizer solution

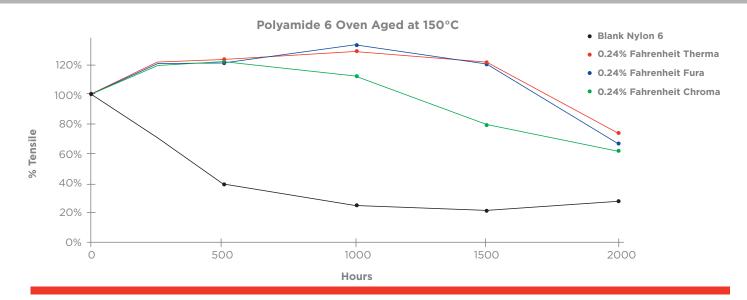
Can be used in all polyamide applications

Offers the highest thermal stability, best processability, maximum melt solubility, and superior dispersion with outstanding surface quality

Has the highest level of synergy with other plastic additives, including light absorbers, HALS, other stabilizers and more

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Melt Solubility in Polyamide 6



#### **Fahrenheit™ Radia**

Exceptional resistance to automotive fluids

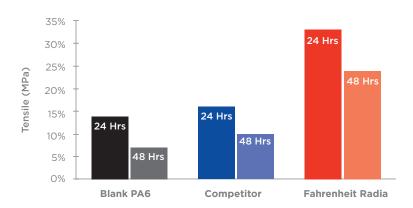
Resistant to fluids such as ethylene glycol and water solutions at temperatures up to 135°C

Based on novel technology enabled by a state-of-the-art thermal stabilization system with unique additives to prevent degradation from aqueous-based automotive fluids

Available in either a granular form or as a free-flowing pellet

Suggested dosage rate for PolyAd® Fahrenheit Radia is 0.5-1.5% for injection molded applications

#### Tensile After Aging in 50% Glycol at 135°C



#### **Fahrenheit<sup>™</sup> Chroma**

Improved color, lower copper, and reduced conductivity

Maintains high temperature thermal stability while improving color, lowering copper and reducing conductivity

Ideal for fibers, automotive, electrical connectors, and colored applications

Benefits include easier dispersion and improved processing

Enabled by a novel technology combining a copper halide stabilization system with a synergist, this series offers thermal stability of 1000 hours at 150°C while improving color and minimizing conductivity





## **Fahrenheit**<sup>™</sup> **Fibra**

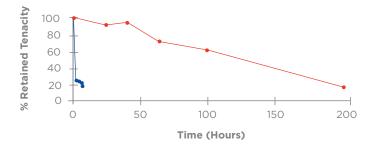
Improved color and excellent melt solubility

Very high performance thermal stabilizer for demanding fiber applications

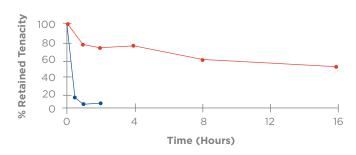
Ideal for industrial fibers, automotive tire cord, and outdoor fiber applications



Polyamide 6 Yarn (300/40 DPF) Oven Aged at 180°C



Polyamide 6 Yarn (300/40 DPF) Oven Aged at 205°C



- Blank Polyamide 6
- 0.3% Fahrenheit Fibra

### **Fahrenheit™ Electra**

Very low conductivity and good long-term thermal stability

Stability of 6000 hours at 120°C for PA 6

Ideal for thermal stability of electrical and electronic applications

Copper and halogen-free



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