Real solutions.
Real DSM Stanyl®.

ChasePlastics®
Redefining Resin Distribution®

Stanyl® is a polyamide 4/6 that provides unmatched performance and value across a broad range of applications. Stanyl® has highest retention of mechanical properties at elevated temperatures, excellent wear and friction, and outstanding flow that allows for easy processing and increased design freedom.

Products offered

Standard unreinforced grades: Available in different viscosity levels for both injection molding and extrusion processes

Glass-fiber reinforced grades: Glass-fiber reinforced up to 60%

Impact-modified grades: Unreinforced and up to 30% glass-fiber reinforced

Flame-retardant grades: (UL94 V-2 ,V-0, and 5VA): Unreinforced, up to 45% glass-fiber reinforced, and up to 50% glass-mineral reinforced

Wear-resistant grades: Available in PTFE modified, MoS2 modified, carbon fiber (up to 30%) reinforced, and aramid fiber reinforced

High flow and super flow: Super-high flow versions of many of the aforementioned products

Characteristics of Stanyl®, the world's most versatile high-temperature thermoplastic

MECHANICAL PROPERTIES:
Stanyl® offers the highest mechanical property retention at elevated temperatures (see graph). In addition, it retains an outstanding level of stiffness, due to its high crystallinity, at temperatures close to its melting point.

THERMAL PROPERTIES:
Stanyl® has temperature resistance similar to high-heat materials, such as PPS, PPA, PEI and LCP; it outperforms the thermal capabilities of PA6 and PA66, as well as polyesters across a wide temperature range.

WEAR AND FRICTION:
Stanyl® features excellent wear resistance and outperforms most high-performance engineering plastics under most conditions. Stanyl® performs especially well at high temperatures, high velocity, and high load conditions. It also excels in abrasive conditions or those requiring toughness and non-brittle behavior.

CHEMICAL RESISTANCE:
Stanyl® offers high resistance to many chemicals, including fuels, greases, oils and maintains resistance even at elevated temperatures.

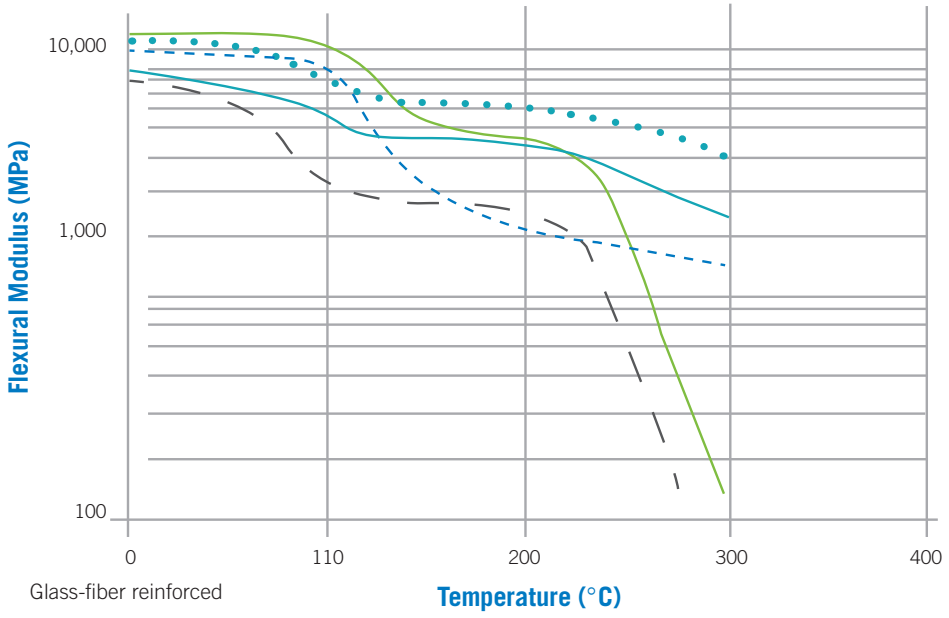
ELECTRICAL PROPERTIES:
Stanyl® is available in grades that offer low and stable dielectric constant at high frequencies, superior arc resistance, and low PLC ratings for a high voltage tracking rate, HWI, and CTI.

FLAME RETARDANT:
Stanyl® has flame retardant grades available with UL 94 V-0 at thicknesses as low as 0.18mm (.007 in) and UL 94 5VA at thicknesses as low as 2.0mm (0.8 in).

PROCESSING:
Stanyl® has outstanding flow for easy processing and design freedom, especially for thin-walled applications. Stanyl® High Flow and Stanyl® Super Flow are available for your most demanding flow requirements.

Flexural modulus versus temperature

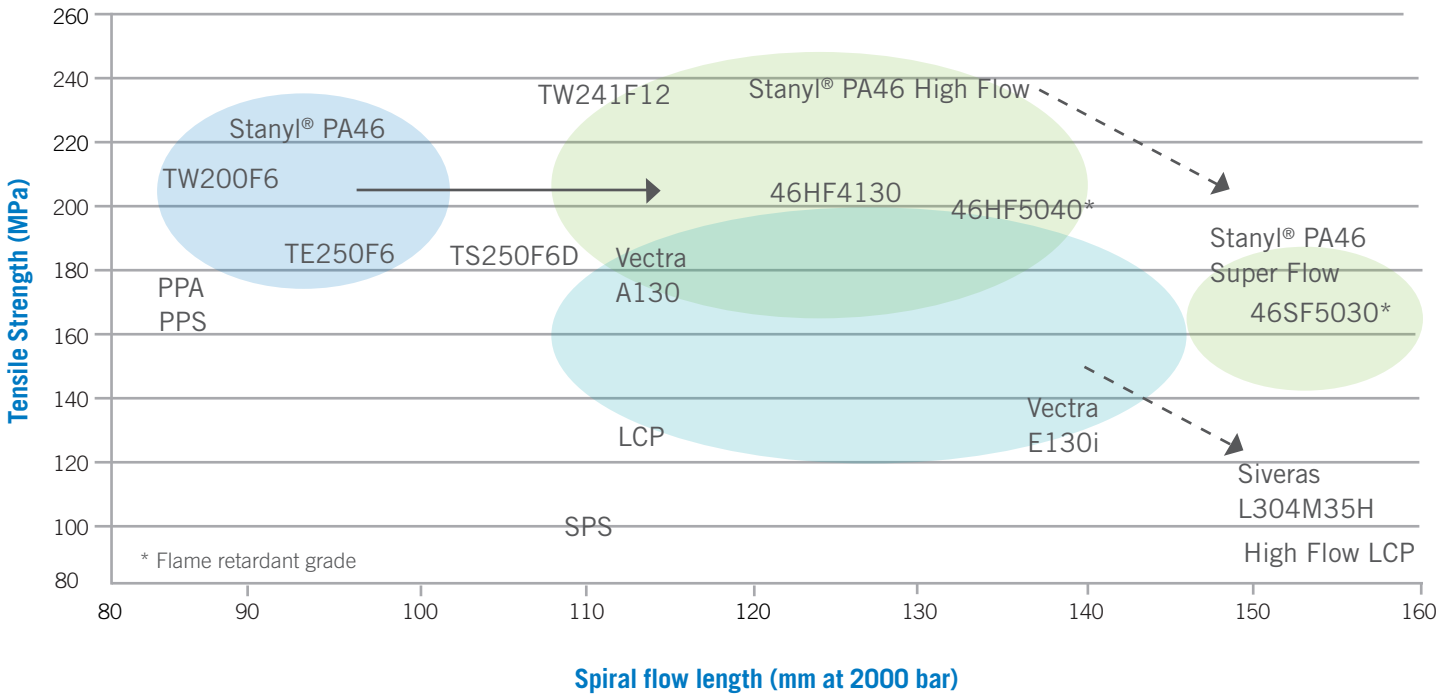
DSM
BRIGHT SCIENCE. BRIGHTER LIVING.



Glass-fiber reinforced

DSM Engineering Plastics Stanyl® Nylon 4/6

Specialty and engineering plastics for the electrical/electronics market

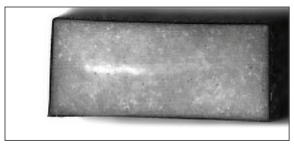


Typical applications/markets

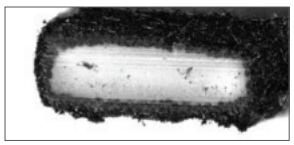
- Metal replacement
- Transmission components
- Air/fluid management
- Electrical connectors and electrical components
- Gears
- Bobbins
- Engine components
- Fasteners
- Wear and friction/sliding applications, including gears, bearings, cages, bushings, guides, and chain and belt guides
- Pumps
- Actuators
- Food and material handling
- Home and garden

Stanyl® Diablo

Revolutionizing performance under the hood (UTH), Stanyl® Diablo is proven to extend the life of UTH components, such as air ducts and turbochargers, through its ability to provide outstanding heat resistance and long-term stability for 5,000 hours in temperatures above 200°C. Stanyl® Diablo is superior to current polyamides, which typically begin to lose mechanical properties with long-term exposure to temperatures above 190°C.



Stanyl® Diablo



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Do you have a demanding application or project that would benefit from Stanyl®? Contact Chase Plastics to learn more about our unmatched product line and portfolio of value-added services. Call (800) 23-CHASE

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