

Engine Covers



Akulon® Ultraflow®

Engine Covers



Akulon® Ultraflow®'s excellent aesthetics and improved flow pass the test for engine covers.

Aesthetic standards long taken for granted in car interiors are spilling into the engine compartment and showing up in engine covers. When the hood is opened on the show room floor OEMs and consumers want to see aesthetically pleasing parts. Akulon® Ultraflow® delivers high performance in engine covers for several OEMs. Toyota turned to Akulon® Ultraflow® for the engine cover in their Sienna minivan. Akulon® Ultraflow® offered excellent aesthetics and warpage reduction over an eighteen-inch part. The improved flow of Akulon® Ultraflow® made it the right choice for PSA-Citroen's engine covers. When compared to standard nylon 6 Akulon® Ultraflow® offered a cost savings due to a reduced cycle time.

Akulon® Ultraflow® can help you eliminate painting and reduce costs.

In today's competitive marketplace OEMs and manufacturers continuously strive to reduce costs. The improved rheology of Akulon® Ultraflow® eliminates knit and flow lines and creates richer surface textures providing visual appeal without painting - that translates to reduced costs.

Akulon® Ultraflow® can further help to reduce costs through:

- Reduction of cycle times
- Smaller machine sizes
- Reduction in scrap.

DSM's high flow nylon 6 family is also finding use in exterior automotive parts (e.g. roof racks), lawn & garden (e.g. leaf trimmer), power tool housings, and furniture.



Akulon® Ultraflow® delivered the flow length and warpage reduction necessary for Toyota's Sienna Minivan engine cover.



Akulon® Ultraflow® provided excellent surface appearance for the Citroen engine cover.

Akulon® Ultraflow® offers improved flow and surface appearance over standard nylon 6.

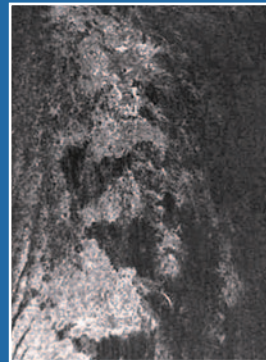
Akulon® Ultraflow® nylon 6 is the result of DSM Engineering Plastics' proprietary method of melt flow improvement. When compared to standard nylon 6 grades Akulon® Ultraflow® excels in important benefits like improved surface appearance and lower molded-in-stress which reduces warpage - all while maintaining comparable mechanical properties.

The surface appearance of parts made from Akulon® Ultraflow® 50% glass fiber reinforced grades is comparable to a 30% glass fiber reinforced standard grade of nylon 6. Improvements in surface appearance are achieved by flow that results in better wetting out of the glass fibers.

In addition to improved flow and surface appearance Akulon® Ultraflow® can provide:

- Reduction in cycle times
- Injection pressure reductions
- Smaller tonnage machines
- Higher glass loadings with thinner wall sections.

The pictures to the right demonstrate the dramatic improvement in surface appearance that Akulon® Ultraflow® offers over standard polyamide 6.

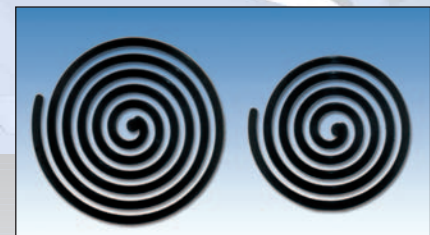
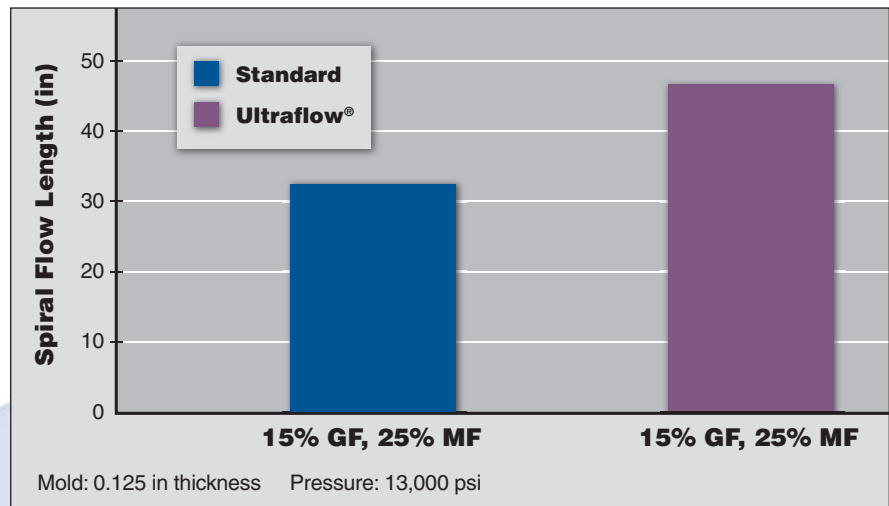


Standard PA6



Akulon Ultraflow

Flow length of standard nylon 6 vs. Akulon® Ultraflow® at 520°F (271°C).



Akulon® Ultraflow® 40% glass mineral hybrid reinforced nylon displays a 50% longer spiral flow length than standard nylon 6.

Akulon® Ultraflow® has at least a 50% higher spiral flow length than an equivalent standard compound with minimal mechanical property tradeoffs. This allows for lower processing temperatures that may provide up to a 25% cycle time reduction and the use of lower tonnage machines.



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