

AP- Nylon Materials

Application sheet 12

Nyrim® Utility service cover

Brüggemann Chemical provides raw materials for three distinct families of **AP-Nylon** (polyamides produced by **Anionic Polymerization**) used in a wide range of applications.

Mechanical properties of these AP-Nylons extend from thermoplastic polyamides into rubber-like elastomeric materials.

AP Caprolactam along with different catalyst systems (**Bruggolen® C**) leads to standard cast Nylon 6.

Nyrim® is elastomer toughened, recyclable, thermoplastic Nylon 6 for industrial Reaction Injection Molding (RIM), Injection Molding and Rotomolding applications. Nyrim® usually contains 10-40% built-in elastomer, depending on the specific performance needs.

The stiffness / toughness combination of Nylon-6 and elastomer gives excellent impact resistance, wear resistance and repetitive load (fatigue) endurance.

Nyrim® can be selectively reinforced with glass fiber or glass mats and can also be filled with mineral fillers.

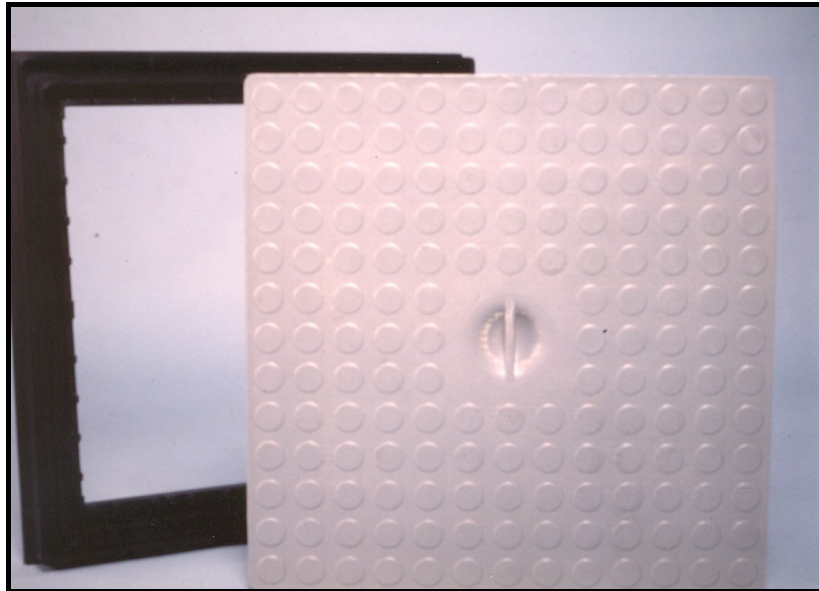
Star-Rim is a toughened Nylon suitable for RIM processing. It can also be reinforced with glass or filled with mineral fillers.

RIM processing is the preferred method to manufacture large, complex or thick parts. RIM processing allows for large design flexibility.

Pressures are lower than injection molding pressures, resulting in lower mold and manufacturing costs.

Contact us:

Brüggemann Chemical
Salzstrasse 123-131
74076 Heilbronn
Germany
☎ +49 7131 1575 0
www.nyrim.com
www.brueggemann.com



This application features two parts; a mineral reinforced frame and an SRIM (glass mat reinforced) cover. Both components are UV stabilized and pigmented.

The resiliency of the Nyrim matrix is advantageously utilized to provide a resin-rich textured surface. The texture provides both a functional non-skid surface as well as additional weathering protection to the fiberglass reinforcement. Usage of Nyrim also eliminates the need for complicated preforms to fill the flanges and ribs.

Important features for this application

Physical properties features	RIM design features
<ul style="list-style-type: none"> • Wear resistance • Resistant to typical automotive fluids • UV resistant • Designed to support loads up to 16 tons 	<ul style="list-style-type: none"> • Utilizes SRIM (Continuous long fiber reinforcement) with plain perform cuts • Cost effective, low pressure tooling