



AP- Nylon Materials

Application sheet 08

Nyrim® Track pads

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



Nyrim track pads are used to decrease surface pressures for heavy equipment working in peat bogs, swampland and sensitive areas such as membrane-lined landfill sites. They are also used in rice field applications.

The track is 300% lighter than the steel pads it replaces: up to 4 tons of weight can be saved per machine. The saving in weight allows an increase of payload capacity without damage being done to the ground.

Nyrim is ideally suited for this type of application because of its excellent toughness, self-cleaning surface, abrasion resistance and thick section moldability. The track pad is non-corrosive and maintains its shape after years of exposure in these environments.

Track pads are also used without any problems during wintertime because Nyrim has a very high impact resistance even at low temperatures.

A benefit when used in membrane lined landfill sites is that the propriety design allows for the track to maintain traction without breakage of the film. There is no need for support platforms.

The low mould costs allow for a large range of track pads to be available to the customer.



Nyrim lightweight track pads withstand the heaviest repetitive loads without breakage.

Important features for this application

Important features for this application	
Physical properties features	RIM design features
<ul style="list-style-type: none"> • Excellent toughness / resilience • High impact strength, even at sub-zero temperatures • High abrasion resistance • Molded in color (black) • UV stabilized 	<ul style="list-style-type: none"> • Large thick parts can be molded economically • Large surface area with low clamping tonnage