BrüggemannChemical
L.Brüggemann Kommanditgesellschaft

AP- Nylon Materials

Application sheet 06

Nyrim® Logistics container

BrüggemannChemical provides raw materials for three distinct families of **AP-Nylon** (polyamides produced by **A**nionic **P**olymerization) 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.

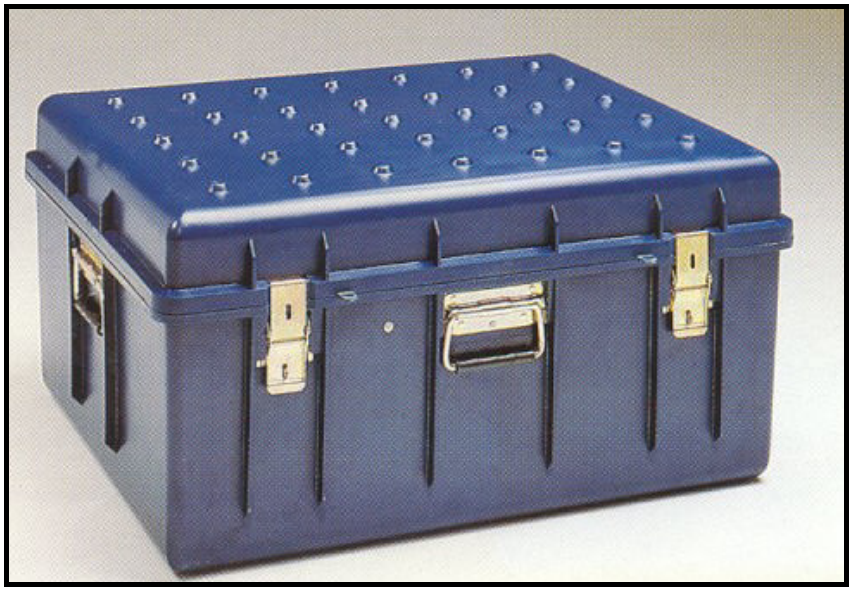
Nyrim® is elastomer toughened, recyclable, thermoplastic Nylon 6 for industrial Reaction Injection Molding (RIM), Injection Molding and Rotomolding applications. Nyrim® usually contains 10-40% built-in elastomer, depending on the specific performance needs.
The stiffness / toughness combination of Nylon-6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

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



The logistics container is used to transport medical supplies and sensitive electronic equipment to field operations.

A fully loaded 600*800*400 mm box withstands a drop from 30 meters on a rocky surface, simulating a drop unload from a helicopter.
Nyrim is used as a replacement for both metal and reinforced ABS. The RIM process allows for the eliminating of knit lines, which is especially important for corner impact strength.
This part can be produced with a pigmented, UV-stabilized formulation or painted with an infrared absorbing paint.

Important features for this application	
Physical properties features	RIM design features
• Excellent toughness; drops from 30 meters without breakage • Colorable • Paintable if required	• Knit-line free molding • Large surface area with low clamping force • Large size containers are possible at low cost • Ability to mould deep drafts without weakened corners