



Info Sheet
Rotomolding Resins

SURPASS® Resins

For Rotational Molding

NOVA Chemicals has developed novel, world class catalyst & reaction technologies to create innovative, industry leading resins designed specifically for the needs of rotational molders. Developed with Advanced SCLAIRTECH™ technology, SURPASS solution-phase resins set the new standard for performance in the polyethylene rotational molding market with a unique combination of properties not found in traditional resins. NOVA Chemicals has developed novel, world class catalyst & reaction technologies to create innovative, industry leading resins designed specifically for the needs of rotational molders. Developed with Advanced SCLAIRTECH™ technology, SURPASS solution-phase resins set the new standard for performance in the polyethylene rotational molding market with a unique combination of properties not found in traditional resins.

Our breakthrough SURPASS RMs341-U, RMs539-U and RMs245-U resins set a new standard for high performance in processing flexibility and impact performance in High-Density Polyethylene (HDPE) and Medium Density Polyethylene (MDPE) materials.

SURPASS resins are manufactured using NOVA Chemicals Advanced SCLAIRTECH process technology in combination with NOVA Chemicals' proprietary single-site catalyst technology and features a unique molecular architecture permitting significant improvements in cycle time, processing window breadth and balance of physical properties.



Key Benefits

- Up to 20% faster cycle time which improves plant productivity, lowers energy costs and reduces the carbon footprint of the manufacturing site.
- Fast densification allows for lower peak internal air temperature—a broader process window, shorter cooling times and a lower scrap rate—saving you money.
- Highly versatile resins allows molders to consolidate resins, reducing supply chain costs and complexity and working capital requirements.
- Enjoy better stiffness and UV weatherability than can normally be achieved with higher MI and lower density resins.
- Provides strength and toughness for thinner parts.
- Optimized mold release properties — lower warpage and controlled shrinkage.
- Superior whiteness and reduced pigment interaction.

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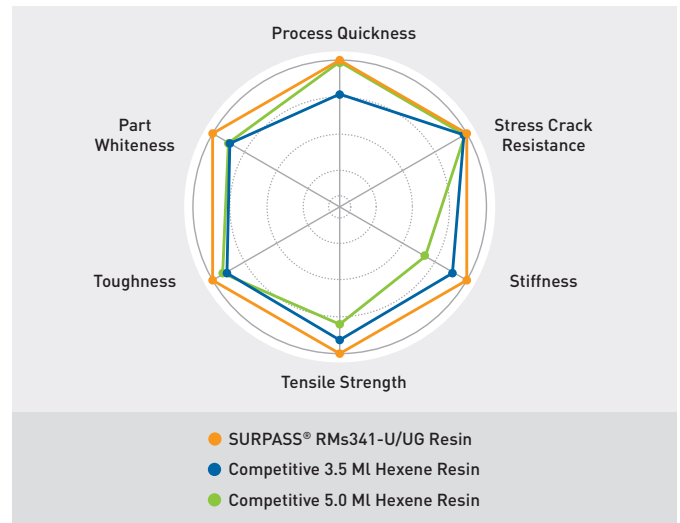
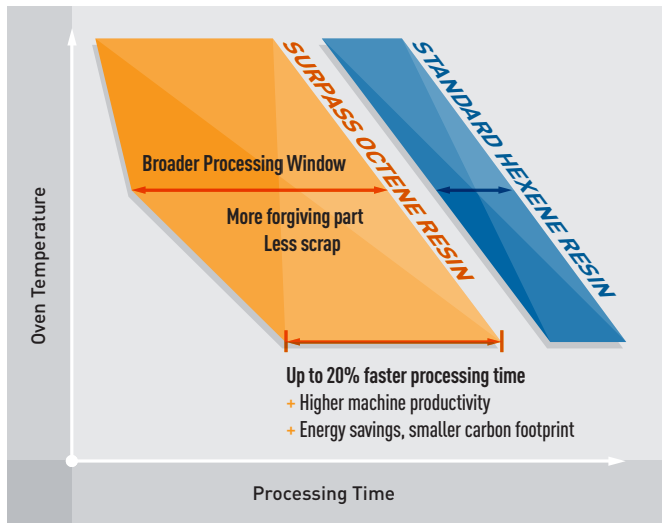
CASE STUDY

**Heavy Duty Storage Tank Manufacturer
Selects SURPASS RMs341-U Resin**

The benefits of SURPASS RMs341-U resin are currently being employed by a North American heavy duty storage tank producer. NOVA Chemicals' technical service team members worked closely with the rotational molder to engineer the best solution for everyone involved.

The end result is a tank that takes 15% less time to produce, has increased stiffness, toughness and inherent base whiteness than a tank made with a competitive material.

The option also exists to operate an oven at a colder temperature and maintain the same cycle time. This reduces energy costs and contributes to higher sustainability.



DID YOU KNOW?

SURPASS rotomolding resins perform faster at lower oven operating temperatures, have higher productivity and less scrap than standard resins.

SURPASS rotomolding resins deliver improved stiffness, toughness and processibility.

Using SURPASS resins allows molders to expand into applications that are currently being designed with other engineering materials as well as enable successful entry into new markets.

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