

Synthesis of High Melt Strength Polypropylene Resin w/o Gel Content

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Polypropylene used in common object

Technology Summary

Polypropylene-based resin is one of the most important thermoplastic materials with regard to its lightweight properties, thermo- and chemical stability and good cost performance. To improve melt strength of polypropylene resin, long-chain branched polypropylene (LCBPP) polymers were produced using commercial Ziegler-Natta catalysts with high catalyst activity and desirable polymer structures.

Application & Market Utility

High-melt strength polypropylene resin that can be utilized for foaming applications. Polypropylene foam is a tough, resilient and lightweight foam that is moisture and chemical resistant and can be used across a wide range of temperatures. Polypropylene foam is often used for cushioning, packaging, automotive components, and many other applications.

Next Steps

Demo available; seeking potential licensees.

TECHNOLOGY READINESS LEVEL

4-7

Seeking

Investment | Licensing | Research

Keywords

- packaging
- foam
- polypropylene
- thermoplastic
- automotive

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