



KAYSUN

INJECTION MOLDING & ENGINEERING SOLUTIONS



CHECKLIST: OEM-MOLDER STRATEGIES *for the Resin Shortage*



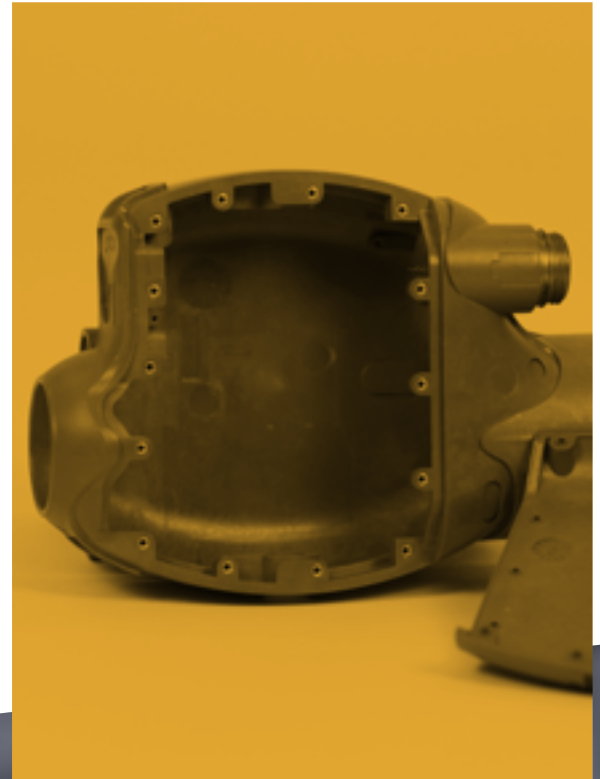
The global pandemic presented challenges for all industries regardless of product or service. However, the added pressures of the Suez Canal blockage/shutdown and a power-grid-crippling winter storm that halted 80% of U.S. resin production sent the plastics industry reeling.

Currently, recovery is incremental at best. The ripple effects continue to stretch into an uncertain future. The only constant is rising resin prices as supply falls short of demand.

OEMs are in an unenviable position. Delaying design and production decisions based on spotty resin availability only perpetuates delays — and potential loss of market share. But, moving ahead could prove risky.

Turning to your injection molding partner is one of the best ways to understand and select appropriate resin alternatives for even the most complex applications.

Use this checklist to leverage their experience and materials expertise to guide you through the turbulent resin market to cost-effective solutions.





IDENTIFY: Resin Characteristics and Alternatives



With 25,000+ engineering plastics available, narrowing down thousands of options to a handful of suitable choices doesn't happen by chance.

Collaborate with your molder to optimize part designs using alternative resins. Identify the function, environment, exposure risks, and performance expectations of the injection-molded part, including:

Physical load. Defining impact expectations ensures the part will stand up to the conditions of everyday fatigue, plus meet any safety requirements

Mechanical function. The resin chosen must be right for the rigors of the application

Thermal conditions. Fluctuating and extreme temperatures could point to the use of high-temperature resins. These materials are more difficult to work with due to higher melting points, requiring careful deliberation of all aspects of a project from safety and sterilization to molding processes

Chemical exposure. Harsh substances found in industrial environments (e.g., greases, oils, solvents, or cleaning solution chemicals) could erode certain resins

Potential assembly. Assessing multi-shot technology or overmolding may ensure resin interplay and compatibility with other system components


IMPLEMENT: Collaborative Steps and Confident Decisions



Engaging your injection molder in all aspects of your project has taken on added importance during the resin shortage. Relying on their insights and expertise leads to confident decision-making about resins, and gives you these vital collaborative opportunities to:

Source early. Extended lead times are the norm as a result of the resin shortage. Being proactive instead of reactive when sourcing resins minimizes the impact

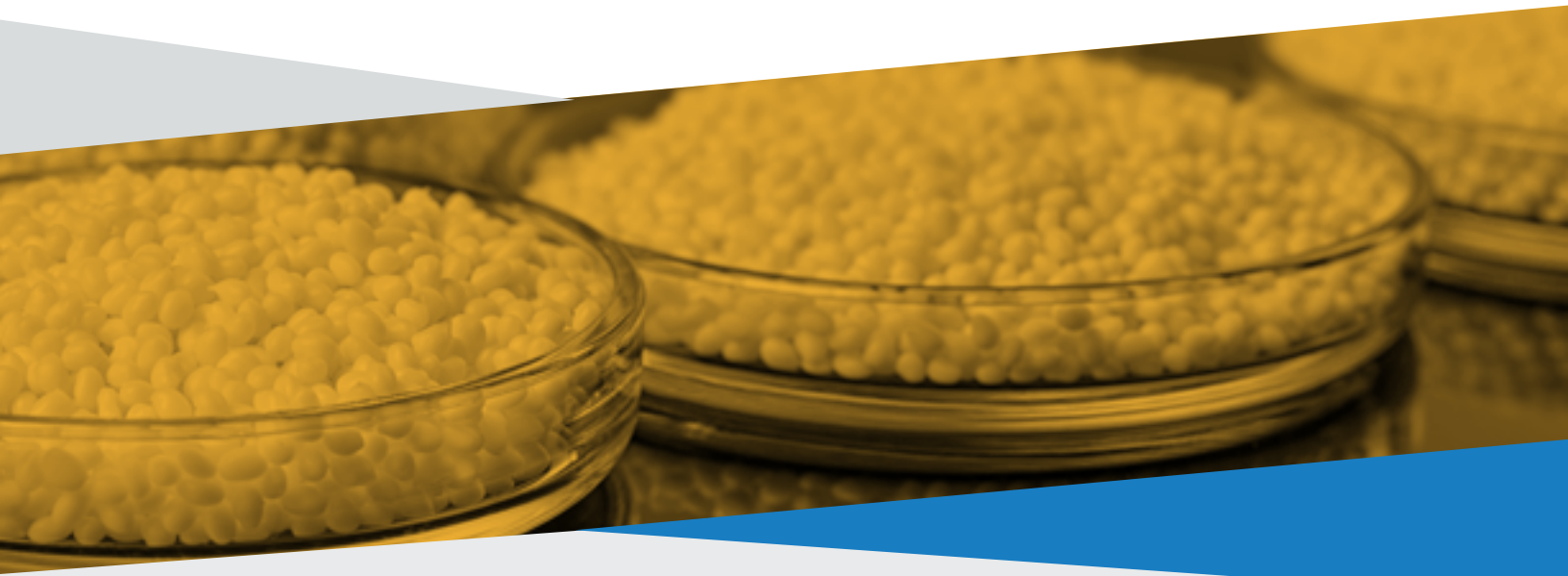
Streamline materials management. Leveraging key supplier relationships to source alternative resins is recommended — and increasingly required — to help balance resin availability, lead times, and production schedules



Protect injection-molded part quality. A molder that specializes in Design for Manufacturability (DfM) and other advanced analysis processes is instrumental in qualifying potential alternative resins to safeguard part integrity. This includes a molder that will look for solutions that don't involve costly re-tooling

Determine viability. Testing and sampling injection-molded parts constructed from alternative resins is non-negotiable. Moving to production without quality and performance assurance could lead to costly delays and failures

Implement a failsafe global supply strategy. For customers that wish to invest in collaborative regional supply chain disruption mitigation, Kaysun offers a global supply chain strategy that includes identifying different countries of origin (typically at least one onshore and one offshore plastics supplier) for materials fulfillment. In the event a vendor is unable to fulfill an obligation, a backup is already vetted and ready to step in



The resin shortage underscores the advantages of working with your injection molding partner to identify and implement successful alternative resin strategies.

Kaysun is the preferred custom injection molder for OEMs across industries because of our experience, expertise, and willingness to collaborate on finding successful solutions. How might we help you through the resin shortage and beyond?

*Contact the Kaysun team today to
discuss your next project.*

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