

4 Questions to Ask Your TiO₂ Provider to Mitigate Supply Chain Uncertainty







As supply chain disruptions rise in frequency and severity around the globe, procurement professionals at coatings producers have no choice but to plan for the worst.

Major events have significantly disrupted the availability of materials in nearly every industry. Recently, ongoing freight shipping issues, labor shortages, and natural disasters have applied additional pressure on supply chains that were already constrained due to the COVID-19 pandemic.

These supply shortages can halt production, lead to missed orders, deteriorate customer relationships, damage brands, and negatively impact revenue for coatings producers. In fact, multiple force majeures caused by events such as Hurricane Ida have led multiple coatings manufacturers to lower their revenue targets for 2021. These supply shortages are arising at a time when demand for TiO₂ remains high, placing even more pressure on coatings procurement departments.

Whether it be caused by COVID-19 related delays, shipping logistics issues, or a natural disaster, experts predict supply chain disruptions will persist over the next several years. In this environment, procurement officers must take steps today to prepare for the next inevitable supply interruption.

Working with a reliable ${\rm TiO_2}$ supplier that can consistently deliver necessary materials in today's supply constrained environment must be a critical aspect of paint formulators' contingency plans. When planning for the next supply disruption, procurement professionals should ask their ${\rm TiO_2}$ suppliers the following questions:



In the event of a supply disruption, what type of material substitutions or technical support could you offer me?

The answer to this question will show how well your supplier truly understands your offering and their ability to support you through a disruption. To get a deeper sense of a supplier's technical expertise, procurement teams should inquire about suppliers' team of technical experts that can get creative and quickly offer solutions when needed. Suppliers that have research facilities and a deep bench of technical experts are typically better suited to help formulators overcome supply constraints.

With a deep understanding of a formulators' products, material needs, and production processes, suppliers can quickly offer suitable substitutes in the event of a supply disruption that will enable seamless, continued production or reformulation.

As a follow up, procurement professionals should ask suppliers if they have increased or decreased their research and development and technical staff headcount over the last several years. Many suppliers have cut back in these critical areas to save costs. This trend can be an indicator of the supplier's ability to offer technical support in a supply crisis.









What is your contingency plan in the event of a supply disruption?

Proactivity is key, and the most reliable TiO₂ suppliers have contingency plans for natural disasters and other inevitable disruptions that have the potential to impact supply chains. Ask your supplier for contingency plan specifics as well as examples of when the supplier responded to a previous supply chain issue to get a better sense of their preparedness. Flexibility of production is a crucial element of reliability. Ask for a production footprint of plant locations and for specifics on the duplicability of grade production at various plants.

When disaster does strike, prepared suppliers will be in touch early and often with options to keep production up and running. The most reliable suppliers will feel like a true partner and will work closely with your teams when supply chain disruptions occur to provide your entire organization with the peace of mind that production will continue seamlessly.





Do you have a proprietary source of raw materials or other infrastructure in place that helps limit supply disruption?

Having a diversified portfolio of connections with mining sites and raw materials sources has become table stakes for ${\rm TiO_2}$ suppliers seeking to guarantee the availability of critical materials. The most reliable ${\rm TiO_2}$ suppliers will have their own proprietary source for raw materials in various locations to ensure that even in the face of a natural disaster or other regional event, these materials can be sourced at all times.

Key raw materials should also be strategically contracted or come from multiple sources to further reduce concentration risk. It is important for procurement departments to understand the critical raw materials used in their products and ask their suppliers about the sustainability of supply of these materials in order to best plan for the future.

Logistics infrastructure has served as a key differentiator during the current supply crisis. Ask your supplier if they have dedicated carriers that can sustain a driver or equipment shortage. Do they have preferred ocean contracts that allocate equipment (boxes, chassis, etc.) as forecasted?

Strong partnerships can be the difference between a production halt or a seamless transition.







Are you keeping up with regulatory developments and industry standards?

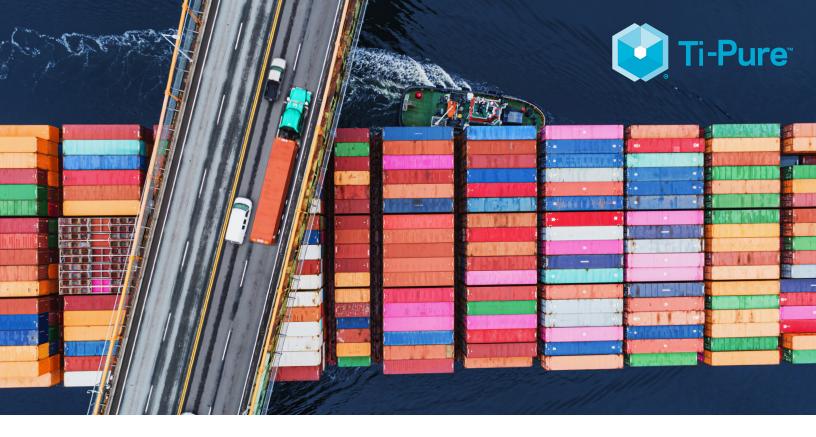
International regulations around the packaging and shipping of raw materials are changing. If your supplier is not fully compliant with these evolving rules, your production may be at risk if regulators intervene. If your supplier is hit with sanctions or penalties, it may affect the availability of crucial materials you need for production.

Coatings procurement departments must ask their ${\rm TiO_2}$ supplier if they are staying ahead of potential regulatory changes and challenges, like the TMP classification. Additionally, procurement professionals should inquire about packaging and shipping documents to ensure they are in compliance to prevent international shipping disruptions.

Navigating the new supply chain normal

Finding production consistency in today's supply constrained environment will require procurement departments at coatings producers to go above and beyond when it comes to performing due diligence on their TiO₂ suppliers. As new supply constraints proliferate and the logistics environment continues to present challenges, procurement departments must form close relationships with their suppliers and ensure contingency plans are in place.

With customer demands for high-performing, cost-effective coatings increasing, coatings producers should do everything they can to avoid the next supply bottleneck. Asking their ${\rm TiO_2}$ suppliers these four questions is a great place to start, and the planning and preparation process must be ongoing as new supply challenges continue to come to light.



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- Better Processability: High-quality Ti-Pure[™] TiO₂ pigments ensure consistency from batch to batch.
- Superior Hiding Power: Creating brighter brights and whiter whites, Ti-Pure™ increases hiding power for uniform, one-coat coverage without needing to prime.
- Ease of Application: With fewer drips, smoother brush strokes, and faster drying times, Ti-Pure[™] pigments boost paints' productivity.
- Uncompromising Endurance: The UV protection afforded by Ti-Pure™ leaves a durable, washable surface that resists fading, cracking, and discoloration over time.



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