

PROGRAM BULLETIN

# **Challenges of In-House Plastisol Production**

At first glance, it may seem that producing plastisol in-house makes a lot of sense—and it may be the right choice for you. If you are debating that decision, however, consider the true costs and the potential impact on your operations.

### STAY FOCUSED ON YOUR CORE BUSINESS

- Production planning for your end products can be challenging enough without the added complexity of planning and producing for your own plastisol needs.
- Quality control is critical; when you produce plastisol you take on the challenges associated with consistently producing in-spec formulations for your end product.
- Maintaining your production equipment is a fulltime job; keeping plastisol mixing equipment up to industry standards can cost tens of thousands of dollars a year.

### PLASTISOL PRODUCTION CAN BE MESSY AND DUSTY

• Plastisol is a liquid and when you use liquid, you risk spills on your plant floor. Spills lead to messy mixer areas which can create safety issues and take hours to clean. Like equipment maintenance, labor hours to clean these areas can add up to tens of thousands of dollars a year.  On average, with every 50 pound bag of dispersion resin used in your production, 100 grams is lost in the air as dust and ultimately settles on the floor and equipment. Unless you have a proper air filtration system and/ or protective equipment, it can be inhaled by anyone in the plant, which can potentially create health concerns. If you are producing 1 million pounds of plastisol annually, you are also losing 1,300 pounds of resin into the air. That is enough resin to fill a compact car.

### **SCRAP IS INEVITABLE**

- For a company producing 500,000 lbs of plastisol annually, a 2% scrap rate could equate to \$15,000 or more in lost product.
- Disposal of scrap plastisol is difficult and costly; you could ultimately pay more than \$0.30 per pound to have your scrap converted into usable product.





## **HOW AVIENT CAN HELP**

### **SUPPLY CHAIN INTEGRITY**

The supply for PVC dispersion resin can be volatile. History proves that when supply gets tight, small plastisol producers can be the last in line to receive resin. Because these vinyl materials are a core competency of Avient, we have strong relationships virtually assuring an uninterrupted supply of dispersion resin.

Consider, too, that additional supply chain issues regarding pigments, stabilizers and additives that are regularly rationalized out of production can leave you scrambling for last minute formulation alternatives that require requalification. Thanks to our strong supplier relationships, we are typically aware of these changes ahead of time and often will have an alternative formulated before discontinuation affects the supply chain.

### **INVENTORY MANAGEMENT**

Producing plastisol in-house means managing the necessary raw materials. Avient can help by reducing your inventory complexity and driving out cost to manage. We can also help you improve lead times by eliminating inventory planning steps and reducing the challenges you can face from a long raw material delivery cycle.

### **UNMATCHED TECHNICAL EXPERTISE**

A full staff of chemists is devoted to formulating plastisol in order to overcome our customers' biggest challenges in the field. We have the expertise to help you clear your formulation, processing, or regulatory hurdles.

When you consider the hidden costs and potential distractions associated with in-house plastisol production, it may make sense for you to stay focused on your key priorities—keeping your customers happy and growing your business. Let Avient focus on what we do well; providing plastisol solutions formulated to the specific color, durometer and viscosity needs of your critical applications. **Challenge accepted!** 

Ready to learn more about our versatile portfolio of CORE<sup>™</sup> Vinyl Plastisols? Call 1.844.4AVIENT (1.844.428.4368) or visit www.avient.com.

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