Reclaim Guidelines for AVantage® Resins

A key feature when using liquid photopolymer resin is the ability to reclaim and reuse the liquid photopolymer. This creates a very attractive financial benefit for the customer as well as an environmental benefit.

Equipment and procedures for the collection and handling of the liquid photopolymer reclaim resin may vary from one prepress department to another. With careful handling, resin reclaim can produce high-quality printing plates with some basic guidelines being observed.

Collection: Care must be exercised so the photopolymer resin is not exposed to any UV light. All collection containers should be opaque and the room illuminated with yellow or UV filtered lights to prevent accidental exposure.

Filtration: Reclaimed liquid resin needs to be filtered to remove any gels, solid pieces of resin or foreign matter. The filter should be in a position that is easy to access; either in-line or at the mouth of the collection container. Filtering the reclaimed liquid resin with cheesecloth, aluminum, or stainless steel using 100-200 mesh is recommended. The filter should then be cleaned once a week for improved performance.

Overflow resin can also be collected from the overflow tray. This must also be screened and then it can be mixed with the reclaim resin.

Mixing: If the reclaim is being used straight to a bucket system, the resin needs to be aerated before use and mixed with virgin resin. The mixing process is not complicated. Reclaim resin can be mixed with virgin resin at a recommended 3 to 1 ratio (3 parts virgin resin to 1 part reclaim) and then blended in the tank.

Always add resin at the end of the day, pouring reclaim in first, followed by the recommended ratio of virgin resin. Let the system’s mixer or blender run all night to thoroughly blend the resin. The practice of adding and mixing reclaim resin with virgin resin should be done daily to avoid building up large volumes of reclaim resin.

Safety: Use proper Personal Protective Equipment (PPE), gloves, and safety glasses when handling the liquid resin from the reclaimer to the storage tank.