

Tech Tip 109

Resin Reclaim Guidelines

For Systems without Auto Reclaim & Blending

High quality printing plates can be produced from the use of reclaimed resin at all locations if the following basic guidelines are observed. Equipment and procedures for the collection and handling of MacDermid liquid photopolymer reclaim resin may vary from one location to another.

COLLECTION

Photopolymer resin must be protected from ultraviolet (UV) light. Eliminate source UV by filtering sunlight or metal halide lamps. Alternately, all resin collection containers and piping should be opaque. Reclaim collected from the drain pan is not recommended for use due to its proximity to the light source during platemaking.

FILTRATION

Filtration is necessary for the removal of gels, dirt, and other foreign matter. The filter can be positioned at the mouth of the collection container; ensure that it is cleaned regularly to prevent plugging.

Recommended filtering media are cheesecloth or any cloth filter having a 200 micron to 300 micron (0.012") mesh opening. Filters made of aluminum or stainless steel are also acceptable with 50 mesh screen. Do not use filters made from brass.

AERATION

Any liquid resin reclaimed from the platemaker, an exposed plate, or that has been exposed to UV light may need to be aerated before reuse. If the mixing instructions below are strictly followed, aeration should not be required.

MIXING

A homogenous mixture ensures consistent photospeed of the resin. Reclaimed resin should be added back into the resin manifold tank or a MacDermid supplied mixing tank at ratios dependant upon the type of plates being manufactured.

- For conventional plates, utilize up to a 3:1 ratio, virgin resin to reclaim.
- For In-Position plates, utilize up to a 1:3 ratio, virgin resin to reclaim. This ratio assumes that all reclaim being utilized comes from an In-Position platemaking workflow.

Frequent additions of reclaimed resin, on a daily or shift basis, are easier to blend into the system than waiting for large quantities. Tank mixers should run continuously to ensure thorough mixing, and resin tanks should be kept full.

PRODUCT SAFETY

Material Safety Data Sheets (MSDS) should be read and understood prior to working with any platemaking product.

