

PRIMER INTELLIGENCE

CLEAN UP

Water-based Mica primers are formulated to adhere to polymeric films, paper and foil. Unfortunately, many of the primers are also prone to bonding with chrome and ceramic applicator cylinders, metal machine parts and, frankly, most equipment on which they are allowed to dry. The following recommendations are the culmination of more than 30 years of priming and clean up experience.

The Golden Rule of Clean Up

Do not allow the primer to dry on surfaces.

Wet primer can be easily and thoroughly removed with water or a mix of soap and water. Keep the applicator cylinders rotating slowly during downtime to significantly reduce the effort involved in clean up. To avoid scratching, scrub chrome surfaces with brass brushes, ceramic surfaces with stainless steel brushes or bristles.

Stubborn Deposits

Despite our best efforts, sometimes primer ends up drying on machine parts. The dry residue is often a tough, chemically-resistant coating, demanding more aggressive cleaning techniques.

The Chemical Approach

- ❖ Caustic materials will dissolve most types of primer residue. An aqueous, high pH solution, such as **sodium hydroxide in water** or **ammonia in water** will loosen deposits. “**Fantastic**” will cling to difficult-to-reach areas and vertical surfaces. Be sure to take the appropriate safety precautions recommended by your supplier when handling caustic materials, and ensure machine parts are not susceptible to corrosion.
- ❖ **Commercially available cleaning products** are offered by specialty chemical suppliers¹ and some engraved cylinder manufacturers.
- ❖ If a solvent-based approach is desired, polar solvents such as **ethanol, isopropanol** or **n-methyl pyrrolidone** are likely to help to loosen deposits. Avoid noxious materials such as benzene, toluene and ethyl acetate, as our primers are inert to most hydrocarbon solvents. The use of methylene chloride is also discouraged.
- ❖ For the extra stubborn deposits, apply cleaner, wet paper towels with cleaner, wrap cylinder with shrink film overnight, brush surface, and rinse well with water.

Mechanical Methods for Roll Cleaning

- ❖ Industrial roll cleaning equipment, based on ultrasonic or chemical washing methods, can be used to deep clean engraved cylinder cells.
- ❖ Systems which utilize small particles to blast residue from cylinder cells include sodium bicarbonate (baking soda)² or MicroClean™ dry media anilox cleaning systems. These are environmentally conscious methods and produce good results.

Common sense reminders: before attempting clean up, please ensure the machine materials will not be damaged by the cleaning technique. When working with chemicals, refer to the supplier's MSDS for proper safety equipment, handling and disposal procedures.

Selected sources:

1. “**SUPER C**” is a raw material designed to yield an effective, heavy-duty industrial concentrate called “Super C Finished A”. “Finished A” can then be further diluted, up to 50:1 with water for use on a variety of industrial applications. “Super C Finished A” has been found to be effective on grease, oil, tar, and food soils as well as printing inks and related coatings found in the packaging industry.

“**Extra UV**” is a unique, non-flammable water-based replacement for flammable cleanup solvents such as Alcohol, Ethyl Acetate, MEK, Acetone and other flammable solvent blends in the graphic arts industry. “Extra UV” may be used straight, or diluted with water prior to use, and is a safe and efficient solvent replacement in cleaning applications where reduction in VOC’s is sought, and/or an upgrade of safety practices is required. “Extra UV” may be used on flexographic, rotogravure, dry offset, and rotary letterpress printing applications.

“**Rollout**” is an environmentally friendly product recommended for cleaning chrome and ceramic cylinders.

“Super C, Extra UV, and Rollout” are available from Danko Industries, Inc., 181 Wolf Street Unit C., Yorkville, Illinois 60560; Phone (630)-882-6070

2. ESCA Chemical, 1330 Industry Road, P.O. Box 429, Hatfield, PA 19440; Phone: 1-800-699-3722, www.escachemical.com.