

COATINGS, CLEANING-UP AQUEOUS / WATERBASE & UV-EB

First of all, read and refer to the coatings MSDS for all appropriate safety and handling information. Regarding cleaning-up we recommend the following.

When handling aqueous coatings wear safety glasses and rubber protective gloves. Wash up with soap and water. Open drums and use coatings in a well ventilated work space.

Aqueous coatings are designed to dry to the touch quickly as water is evaporated leaving solids to form a film. Most aqueous coatings will rewet, so that moving coater parts seeing fresh coating will not dry or tack up.

BEFORE A RUN

1. Wipe down coater rollers, blanket, or plate, etc., with water, removing dust.
2. Wipe out coating pan similarly.
3. Purge any water from hoses before pumping coating.

DURING A RUN

1. After a short press stoppage (under one minute) start back up normally.
2. If stopping for longer than one minute wash the coater blanket, and/or plate with water and dry. Some litho presses now have auto blanket wash-up devices.
3. If ink appears on the coater blanket remove with the appropriate press wash and then go over with water and dry.
4. If coating appears on any back-up (impression cylinder) and goes tacky it may be cleaned with products such as alcohol containing Windex, or 409.

Again, first read and refer to a Ultraviolet or Electron Beam curing coatings MSDS for all appropriate safety and handling information.

Most UV and EB free radical curing coatings are formulated from 100% solid materials that do not evaporate. They will remain wet indefinitely and will not be turned from a liquid to a solid except by exposure to UV light or EB energy.

UV-EB coatings contain reactive components which are often irritants and sometimes allergic reaction causing sensitizers. Safety glasses and skin protection with neoprene gloves are a must. Open drums and use coatings in a well ventilated work space. Wash hands with soap and water, never solvents, after exposure to coatings and routinely before breaks and after work. Don't launder coating wetted (contaminated) clothing at home, exposing others.

In production coating practice, very little attention is paid to cleaning-up since with continuous running, clean-up is not necessary with coatings staying open. Even during down times if the coating is shielded from UV light so that curing is not prematurely initiated, clean-up is unnecessary. Covering and shielding coating from exposure to UV light from the sun or lighting while on a coater can be as simple as covering exposed coating with kraft paper to building a fitted housing. The following clean-up recommendations can be made.

Photopolymer plates and blankets may be cleaned with alcohols or other supplier recommended cleaners.

AFTER A RUN

1. Wash blanket with warm water checking that the warm water is not setting up the coating. If it is, use cold water throughout the clean-up process.
2. Clean any coating from impression cylinder with warm water or the more aggressive cleaners mentioned above.
3. Drain coating pan pumping back into drum or other reservoir.
4. Next, start clean-up mode to flush and rinse pan and hoses, cleaning coater rollers with warm water running at least 5 gal. through the system. It is a good idea to clean a system thoroughly monthly.

If clean-up is difficult use warm water/ 10% ammonia blend .

If dry or semi-dry spatters and drips are evident try using products like 409 or Rycokleen.

If a coater will not be used for a while, pull the coating blanket and packing and coat the blanket cylinder with an anti-corrosive agent like oil and kerosene.

OVER

If anilox or gravure cylinders are used in the coating system, clean with very warm water and use the mfrs. recommended cleaning agent and brush cells clean thoroughly following specs.

If using a coating circulation system such as supplied by Technotrans, Royce or Heidelberg follow mfrs. instructions for preparing, running and cleaning-up after coating.

SPILLS & DISPOSAL

Follow MSDS instructions, but briefly always contain spills as quickly as possible diluting 50 fold or more for sewer disposal or absorbing on inert material for waste disposal following all federal, state, and local health, pollution and waste regulations.

BEFORE A RUN

1. *When starting up after a period of inactivity wipe down coater rollers, blanket, and/or plate to remove any dust. This may be done using a detergent/ water mix with an IPA rinse, or given a choice a fast drying solvent such as IPA, MEK, MIBK, Toluol or a litho press wash. Care should be taken with the later that no oils are left. Don't use hydrocarbon solvents as they tend to turn many UV coatings gummy.*

2. *Wipe out coating pan similarly.*

3. *Take care to purge any excessive clean-up solvents from plumbing before pumping coating.*

DURING A RUN

1. *During stoppages clean-up is generally not necessary.*

2. *If conventional or UV/EB ink appears on the coaterblanket remove with appropriate press wash and dry.*

AFTER A RUN

It is also not necessary to clean-up after a run, especially if one is going to start-up again reasonably soon using the same coating. This provided there is no exposure to UV light, causing the coating to cure on coater and press parts. Another consideration is the advisability of cleaning-up when a change

is being made to a different coating formula, e.g., coating with/ without optical brightener or with/without a migratory lubricant.

1. *Drain coating back to reservoir drum or tank.*

2. *Start clean-up mode to flush and rinse pan and hoses, using water/detergent mix, rinse with IPA, MEK, MIBK or Toluol, drain and dry.*

SPILLS & DISPOSAL

Follow MSDS instructions. Spills should be contained as quickly as possible absorbing on inert material, e.g., vermiculite, followed by shoveling up for disposal following all federal, state, and local health, pollution, and waste regulations. Cured, solid UV-EB liquids are solid waste. Uncured they may be hazardous waste. To be safe incinerate.

Whenever you consider coating, consider **CORK!**for leading expertise in formulating.

LOOK TO CORK!..... for all of your coating and varnish needs, for both **aqueous** & **UV/EB** coatings and varnishes.