

Technical Bulletin

Cleaning, Neutralizing, and Passivating Solvent Vapor Degreasers

CLEANING

- Drain all spent solvent from the machine making certain that residual solvent is also completely removed from water separators, spray reservoirs, filters, and other plumbing parts. Remove all filter cartridges. Dispose of spent solvent into appropriate waste container.
- Using an air gun, blow out all solvent vapors making sure that proper safety procedures are
 followed before entering any vapor degreaser. Never enter a vapor degreaser or confined
 space where halogenated vapors can collect prior to proper ventilation. The proper personal
 protective equipment must be utilized and the "buddy system" instituted with appropriate
 supervision. Remember that breathing high vapor concentrations is very dangerous and,
 because the solvent vapors are heavier than air, they tend to concentrate in degreasers, pits,
 and any low spaces nearby possibly displacing any air or oxygen.
- Clean the surfaces with soap or mild, nonabrasive scouring powder. Do not apply with a
 steel brush or sponge that may leave embedded particles in the stainless steel surface or cause
 scratches in the surface that may rust later.
- Rinse thoroughly with clean water.

NEUTRALIZATION

- Fill the machine with clean, warm water until it covers the primary condensing coils, freeboard chiller coils, and water jacket. Make sure that the water fills all spaces contacted by the solvent (liquid or vapor) including the water separators, spray reservoirs, filters, and all plumbing and valves.
- Add 1-1/2 ounces of sodium bicarbonate (or soda ash) per gallon of water and stir it into solution. (Avoid eye or skin contact with the powder or solution, and never use caustic soda for this purpose.)
- Turn on the heaters and warm the water to approximately 120°F (49°C). If available, turn on the pumps and spray lance to further stir the solution and circulate it throughout the entire system. Allow it to circulate in this manner for 1-1/2 hours.
- Measure the pH of the water with pH paper to ensure that it is still alkaline. If it is not, add more sodium bicarbonate or soda ash and repeat step above. Remeasure pH afterwards to ensure that the water is alkaline.

CHEMICAL LOGIC

Equipment & Chemistry for Production

Cleaning, Neutralizing, and Passivating Solvent Vapor Degreasers

Technical Bulletin

If the water is still alkaline, drain the machine and refill if with clean water.	If available, tur	rn
on the pumps and spray lance to circulate the water throughout the entire sys	tem.	

 Drain all rinse water and dry the machine. Reset all thermostats (liquid and vapor), add fresh solvent, and check to ensure that the machine functions properly.

PASSIVATION*

- Rinse the walls of the machine two or three times with a 10 to 20% (by volume) solution of I Stellar Solutions · CitriSurf citric acid passivating process. (SAFETY NOTE: Be sure to wear chemically-resistant gloves and safety goggles for this operation. If any chemical contacts the skin, flush with copious amounts of water.)
- Flush the machine with clear water and dry completely. Reset and charge the machine as described in the previous section.

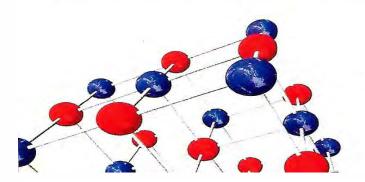
*Passivation of stainless steel surfaces may be necessary before reuse if noticeable rusting has occurred. Passivation can become a complex operation, but this simplified procedure will prove adequate for most cases.

revised February 2002

Stellar Solutions: 847-854-2800 Stellar & citrisurf. com

CHEM LOGIC

Equipment & Chemistry for Production



Rick Perkins

Processes Engineer

512 426-5728

rperkins@chemlogic.us

Chemical Logic Inc 8503 El Rey Blvd Austin, TX 78737 www.chemlogic.us