



## **Regeneration of Drierite Granules**

The Indicating Drierite, found in the canister on the top right rear corner of the P-87 and P-97, is a desiccant made of calcium sulfate (97%) and cobalt chloride (3%). Drierite is non-toxic and can be handled with few precautions. This material is used to remove water vapor from the air-cooling supply system. As it absorbs moisture, it becomes pink in color and must eventually be "regenerated" (dried) or replaced with new indicating desiccant (Drierite, 8m MESH). One pound of Drierite will fill the canister.

❖ To remove the canister from the puller, you must turn off the puller and remove the brown plastic top by loosening the three screws that secure it to the baseplate. Next, slide the input (left) and output (right) air tubes off their white plastic connectors on the canister. There are black plastic clamps which secure the canister to the baseplate. There are two versions of the clamp. One version is made of two sections (alligator style clamp) and the other type is one solid plastic strap. The alligator style can be slid apart at the top of the canister and the solid strap can be released by removing the front screw on the base plate. Remove the canister and unscrew the plastic or aluminum end cap, making sure the black rubber-sealing O-ring stays in place inside the cap. The far aluminum keeper and filter should be kept in place.

❖ Pour out the old Drierite and replace it with new Drierite, filling the canister just below the top nozzle. If you choose to regenerate the Drierite, pour it onto a glass or metal tray, spreading it evenly, one granule deep, and heat it for one hour at 200°C. Before refilling the plastic canister, the Drierite granules should be cooled in a tight container. After cooling, install the Drierite, keeper, and filters into the canister in the order they were removed.

❖ When replacing the cap to the canister, check that the rubber seal is in the proper position and it is best to apply a thin layer of vacuum grease on to the rubber seal to insure a tight fit. There is no need to over tighten the cap, but a good seal is needed to prevent air leaks. Be careful when replacing the cap since the pressure of the spring inside can lead to cross threading the cap.

❖ Replace the canister with the aluminum cap oriented to the left, and the air tube connections to the front. Re-secure the canister with the black plastic clamps.

❖ Connect the tubing to the left port only and turn on the puller. The pump will activate and air will flow through the canister. Allow the air to purge out the right port for 2 minutes before connecting the right tubing. This will blow out and remove any loose Drierite particles which could cause the damage to the air solenoid. Then attach the tubing to the right port and the pump should stop running within a few seconds. If the pump sputters or runs continuously, you have an air leak. With an air leak, the filament will heat up during a ramp test, but will not heat up when you try to execute a program. Check for holes in the tubing, the tubing connections and insure that the cap to the canister is seated correctly and that the cap is on tight.

For additional assistance, please do not hesitate to contact Sutter via phone, fax, or Email.

## **Sutter Instrument Company**

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