

Suitable Containers For Sizing Test Ink

MATERIALS:

All containers involved in storing, measuring, transferring, and dispensing the ink and the dye and formic acid components of the ink should be either glass or high density polyethylene (HDPE). Beware of lids and lid sealing liners on containers that are not made of the correct materials. Lids made of polypropylene (PP) are suitable. Laboratory bottles by Nalgene that are HDPE with PP lids that seal without a lid liner are suitable for ink storage.

NOTE: If you are already successfully storing ink mixes in containers made of other materials and are getting good and consistent sizing test results for a long time with those storage containers, then you may continue using them.

The approved container materials are glass, high density polyethylene (HDPE), polypropylene (PP), and polymethylpentene (PMP).

PAKS:

The naphthol green B dye pak (TAF NGB1) and the 2%, 20%, & 40% formic acid solution paks (TAF 2FA, TAF 20FA, & TAF 40FA) available from The Aderhold Firm Inc. are suitable for storage of the dye solution and of the formic acid solutions that come in the paks for at least one year. The paks must only be used to store the solutions that came in them. They must be kept uncontaminated and tightly closed, except while briefly extracting some of the solution contained in each pak. The internal container of a pak is thin-walled high density polyethylene (HDPE). It must be handled with care to prevent punctures and cracks that leak, and to prevent damage to its sealing surface where it is either capped or the dispensing faucet is attached. The shipping cap is polypropylene (PP) and the faucet attachment is a combination of HDPE and PP.

MEASURING:

To mix 1% formic acid ink, use a clean well-marked measuring container. It does not have to be accurately marked, but the marks must be good enough to get exactly the same volume of liquid each time the measuring container is used. Choose one with very clear marks. The formic acid is clear and transparent like water, but the green dye is very dark, and will seem almost black and opaque while measuring it and can obscure the marks on some measuring containers. Glass laboratory-type graduated cylinders are suitable for measuring the correct volumes. Temporary contact of the dye, formic acid, and mixed ink with other plastics that are mostly inert to strong liquids is permissible while measuring volume, but glass, HDPE, and PP are preferred materials for the measuring devices, and for funnels.

MIXED INK STORAGE:

Glass and HDPE containers of most any type that have suitable lids may be used to store the mixed ink. Laboratory bottles by Nalgene that are HDPE with PP lids that seal without a lid liner are very suitable for ink storage. Beware of lids and lid sealing liners on containers that are not made of the correct materials. Lids made of HDPE and of PP are suitable. Avoid lids that have a sealing gasket made of paper.

DISPENSING:

The Kartell measuring dispenser commonly used for pouring the correct amount of ink (10ml, 10cc) into the sample holder at the start of a sizing test is made of HDPE except for its measuring cup at the top which is made of polymethylpentene. The Kartell dispenser container should not be used for long term storage of the mixed ink, because it leaves the ink exposed to air. Unfortunately no suitable lid has been found to cap off the Kartell dispenser's bottle for ink storage in its lower bottle. Mixed ink can be left in the Kartell dispenser for about a day. Then it should be used up, returned to the storage container if there is a lot left in the dispenser and it has been kept clean, or the remaining ink in the dispenser can be discarded. Rinse out the dispenser bottle with running water and rinse thoroughly all parts of the cap tube and measuring cup dispenser assembly, and let them dry.

CLEAN UP:

All containers, measuring devices, and dispensers should be cleaned with running water. Gently shake off and out excess water. As long as the amount remaining water is very small compared to the amount of dye solution, formic acid solution, or mixed ink to be placed in the container next, it is not necessary to completely dry the container before using it again.

STORAGE:

All containers and measuring devices should be stored so that dust cannot collect in or on them.