

Use of Water-based Ink Systems in Dispenser Units

Guidelines for use, storage, cleaning, and maintenance

Screen/Pad

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Our water-based basic inks and color concentrates are user-friendly systems. As with any water-based systems, there are, however, a few points that require special attention when using them in dispenser units. This information sheet is meant as a practical guide for a flawless operation of Marabu's water-based inks.

Storage of water-based inks and color concentrates

Water-based inks and concentrates need to be stored and used in a place with a temperature between 5 and 35 °C. Please take the following points into account:

- Do not store them in direct sunlight, near central heating radiators, other sources of heat or directly under the roof of a building.
- Avoid storing opened or partially empty cans. Instead, empty the can completely into the dispenser. This will prevent evaporation, drying, and contamination.
- When storing partially empty cans, make sure that the can is properly closed and the opening of the can is free from residues. Keep the storage time of partially empty cans as short as possible.
- Make sure the inks are used within their shelf life.

Handling of water-based inks and color concentrates in dispenser systems

Operating conditions:

- For flawless operation, the machine should be used at room temperature and not be placed near heat sources or in direct sunlight. Sources of humidity should also be avoided.
- For calibration of a circuit the actual batch density of the concentrate in the canister needs to be used.

Filling and refilling:

- Homogenize inks and concentrates manually before filling them in the dispenser. Minimize the inclusion of air during stirring/mixing.
- Before and after filling, clean the outside rim of the canister lid. It isn't necessary to clean inside the lid.
- Pour inks and concentrates into the canister. If possible, empty the cans completely. If not possible, remember to clean the openings of the cans before closing them properly.
- Ensure that the canisters are always filled and the lids are closed to prevent drying. If possible, set warning levels for when content is running low in the canisters.

Daily cleaning and maintenance:

- Clean each part of the machine that is covered with ink/concentrate daily, especially those parts near the canister lids and the nozzles.
- Run the purging program every morning.
- Always keep nozzle caps/closers or brushes wet and clean.
- Stir ink/concentrates in the canisters three times a day for 1 to 1.5 minutes.

- Pay particular attention to the cleaning of the machine before refilling.

Preferable default settings:

Stirring		Recirculation (if available)	
Time	Interval	Time	Interval
120 sec.	480 min.	120 sec.	480 min.

Filling in a used dispenser requires special attention in the following cases:

- The dispenser is currently filled with other water-based concentrates.
- The dispenser has been used very little and has dried concentrates in the canisters.

In these cases, the dispenser should be properly cleaned by following the instructions provided by the dispenser supplier before filling it with Marabu's water-based concentrates.

What to do in case of a microbial contamination?

Due to the absence of solvents and the limitations for usage of biocides, water-based products provide a more convenient environment for microbes than solvent-based. By following the recommendations mentioned above, the risk of contamination within the dispenser is limited but can still not be excluded. A contamination is generally characterized by a strong, unpleasant odour coming out of the canister and/or the presence of mould. Should this occur then take the following action:

1. Remove the contaminated medium from the canister.
2. Send a sample of it (in a clean can) to Marabu.
3. Mention the batch number on the can.
4. If there are unopened cans of the same batch, send one of these to Marabu as well.
5. Marabu will examine the contaminated sample and advise you of the results.
6. Empty the canister with the contaminated product completely by dispensing the whole content.
7. Clean the dispenser according to the dispenser supplier instructions.
8. Pour 2-3 litres of solution (75 % Isopropanol) into the canister.
9. Re-circulate the solution and let it sit in the circuit and canister for about 1 hour.
10. Dispense out all solution.
11. Flush the circuit with clean water to rinse all the Isopropanol out of the system. Not rinsing out all Isopropanol might cause the concentrate to thicken.
12. Dispense out all water.
13. Fill the canister with fresh ink/concentrate and dispense approximately 200 ml ink/concentrate.

Contact

In the event of any queries, please contact:

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