

SunFount 455

1. Description

SunFount 455 is an alcohol substitute fount additive, developed for the use on sheetfed presses. SunFount 455 is OEM approved

2. Product features

SunFount 455:

- is suitable for water qualities up to 200 mg/l hydrogen carbonate
- complies with the requirements of Heidelberger Druckmaschinen, KBA and manroland sheetfed against corrosion (see fogra.de)
- has a recommended dosage of 2 – 4 % (see chapter 4.2)
- stabilises the pH value of the fountain solution within the favourable range for printing
- contains additives to protect the plate from corrosion during short machine down times
- is recommended for printing with alcohol concentrations of 0 – 5 %. In special cases higher alcohol concentrations may be required.

3. Product Suitability

3.1 Applications

SunFount 455 is formulated for offset printing on sheetfed presses with conventional or UV curing inks. SunFount 455 is intended for use in paper and board offset printing. The fount is suitable for all types and all sizes of sheetfed offset printing machines.

The fountain solution additive is not suitable for the following applications:

- Non-absorbent substrates with conventional inks
- For IPA concentrations above 5%

3.2 Substrate

SunFount 455 is suitable for the following substrates:

- Coated and uncoated carton board
- Coated and uncoated paper

4. General Handling

4.1 Storage

SunFount 455 should be stored at ambient temperature between 5°C and 35°C. Avoid exposure to direct sunlight. Under these conditions SunFount 455 has a shelf life of at least 12 months in an unopened pail, drum or IBC.



In cases of being frozen by mistake it should be warmed up slowly. (No heating!) It should be stirred well prior to application.

When storing opened containers it is advised to close the screw cap again to avoid spillage and contamination of the fount.

4.2 Dosage

The recommended concentration of SunFount 455 in the fountain solution mixture is 3% to reach the recommended pH value of pH 4.8 to pH 5.5. Dependent on the local conditions it might be necessary to increase or decrease the addition. Soft or acidic process water might require lower concentrations of SunFount 455. Papers with a strong alkaline surface and the use of very low IPA levels might require an increase in concentration up to 4%. A higher concentration might also be advised when printing effect inks (metallics) where toning is an issue. Other additions than IPA are not recommended.

4.3 Waste disposal

SunFount 455 waste has to be disposed in accordance with good industrial practice, observing all the appropriate local, national and regional regulations and guidance. This applies also to the diluted fount used on press.

5. Printing Conditions

5.1 Inks

SunFount 455 is suitable for printing with all conventional sheetfed offset inks and UV inks.

5.2 Printing Plates

SunFount 455 can be run with any type of aluminium based printing plates (CtP plates, conventional positive or negative plates).

5.3 Press cleaning

It is recommended to change the fountain solution as well as the filters in the fount circulation system regularly.

6. End-use safety

All Sun Chemical Europe printing inks and related materials are formulated in accordance with the CEPE/EuPIA Exclusion Policy. This excludes from use all materials classified according to the CLP Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures as carcinogenic, mutagenic or toxic for reproduction in categories 1A or 1B with hazard statements H340, H350 or H360, in addition to toxic or highly toxic materials with hazard statements H300, H301, H310, H311, H330, H331,



H370 or H372. A copy of the document is available on the EuPIA website:
<http://www.eupia.org>

All components of SunFount 455 are listed in Annex 6 of the Swiss Ordinance on Materials and Articles in Contact with Food (SR 817.023.21).

SunFount 455 can be used to print packaging which meets the requirements of EN71-3 (toy standard).

7. Regulations

When printing food packaging SunFount 455 can be used on the non-food-contact side of food packaging provided that it is used under the relevant Good Manufacturing Practices (GMP) and according to the recommendations of this Technical Data Sheet.

The printer, converter and the packer or filler entity have the legal responsibility to ensure that the finished article is fit for the intended purpose and that the ink, coating and fount components do not migrate into the food at levels that exceed legal and industry requirements as outlined in the EU Framework Regulation (EC) No 1935/2004, the GMP Regulation (EC) No 2023/2006 and the Swiss Ordinance on Materials and Articles in Contact with Food (SR 817.023.21). We recommend that the finished packaging is tested under appropriate representative conditions of use if there are any doubts regarding compliance.

8. Technical Assistance / Contacts

For more detailed advice, consult the Best Practice Guides “Fountain Solution Auditing” and “IPA free printing. For further information please contact your local Sun Chemical team or visit our website on www.sunchemical.com

Our Products are intended for sale to professional users. The information herein is general information designed to assist customers in determining the suitability of our products for their applications. All recommendations are made without guarantee, since the application and conditions of use are beyond our control. We recommend that customers satisfy themselves that each product meets their requirements in all respects before commencing a print run. There is no implied warranty of merchantability or fitness for purpose of the product or products described herein. In no event shall Sun Chemical be liable for damages of any nature arising out of the use or reliance upon this information. Modifications of the product for reasons of improvements might be made without further notice.