



## Brilliant Soluble Toners for Water Systems BSTW SERIES

Brilliant Soluble Toners for Water Inks (BSTW Series) represent a unique fluorescent color ink system which, although delivered in dry form, is totally water-soluble in the presence of a neutralizer. With the addition of ammonia and alcohol, but without other binder additives, a complete water ink system for flexographic and/or gravure inks can be formulated with incredible ease.

Water-based inks made from BSTW exhibit excellent film forming properties, color strength and high gloss. Lightfastness is superior to most solvent-based fluorescent flexographic and gravure inks. It exhibits excellent transparency making it the system of choice for printing on foil and film. This also makes it ideally suited for highlighter inks in felt tip markers. Because of these unique properties, BSTW gives the ink maker an unexcelled flexibility, quality and value when formulating fluorescent water inks.

### Color Guide

Yellow	BSTW-YE817
Orange	BSTW-OG815
Pink	BSTW-PK811
Magenta	BSTW-MG821

Typical 30% Solids BSTW Ink Formula

<u>Component</u>	<u>Percentage by weight</u>
Water	41 parts
Isopropyl Alcohol, 70%	23 parts
Ammonium Hydroxide (28 Bé)	6 parts
BSTW Toner (Dry)	30 parts
<b>Total</b>	100 parts

**Procedure**

It is important that these instructions are followed precisely. They have been tested to minimize the color shift and/or viscosity changes that are typically encountered in water-based ink systems.

Water	41 grams
Isopropyl Alcohol (70%)	23 grams
Ammonia	6 grams
BSTW	30 grams

*Step 1:* Add the water, isopropyl alcohol and ammonia into 8 oz container.

*Step 2:*

Use a high-speed disperser for mixing. It is recommended to use a Cowles type blade but a propeller type would suffice. Start mixing at 800-1000 rpm then sprinkle BSTW in 5 gram increments into the solution (adding too quickly may form lumps of pigment which will take longer to dissolve). Mix for 5 minutes between 5 gram addition. Repeat process until all BSTW has been added then mix for 10 minutes. Test pH during this time. Due to loss of ammonia during the mixing process, pH may be less than 7. Add ammonia dropwise until pH is between 7.0 and 7.5. Keep mixing until BSTW is fully dissolved.

Caution: If inks are not finished in the proper pH range (7.0 - 7.5), color shift may occur if pH is more than 7.5. Precipitation of pigment will occur if pH is below 7.0.

**Storage**

Dry BSTW toner should be stored in a sealed container, away from heat and humidity.

**Toxicity**

Tests conducted through independent laboratories have found Brilliant BSTW toner to be "essentially non-toxic." A summary of the test data is listed on the MSDS, which is available upon request. Good industrial hygiene and handling methods are essential in the use of all products whether or not they are determined to be hazardous.

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