



REACTO PRINT- RP - Urea Replacement in Reactive Printing.

REACTO PRINT –RP

UREA is widely used in reactive dyeing or Acid dyes in small quantity or largely in reactive printing.

The purpose of the UREA is

1. To increase the solubility of dyes in water thus to enhance the brightness and dye intensity.
2. The second purpose is to retain Moisture uniform during steaming to increase the colour yield and fixation.

However uses of high amount of urea causes sever pollution to waste water due to increase in COD & BOD. As large quantity of Urea is used in the paste TDS of final waste water increases significantly. If given enough time, break down to form ammonia giving strong unpleasant smell and irritation to the user.

Reacto-print RP is a water soluble Polymeric product which mainly helps to gain moisture help during steaming to help for fixation. Thus reduces the consumption of Urea to 50-60% in Woven cotton and 30-40% In Viscose fabric

Following are the field report



Urea – 10%	Urea -5% & RP-1%
Strength – 100	Strength - 89.33



Urea – 10%	Urea -5% & RP-1%
Strength – 100	Strength - 99.43



Urea – 10%	Urea -5% & RP-1%
Strength – 100	Strength - 99.81



Note: We observe there is little drop in Turquoise blue/ green shade particularly which can be adjusted by adding little urea in the particular color paste at the time of printing.

Recipe comparison for 100kg Paste for cotton

CONVENTIONAL RECIPE		SUGGESTED RECIPE	
Ingredient	Dose%	Ingredient	Dose%
Sodium alginate / thickener	3-4%	Sodium alginate / thickener	3-4%
Resist Salt	1-1.5%	Resist Salt	1-1.5%
Sodium bi carbonate	3.5%	Sodium bi carbonate	3.5%
Urea	10%	Urea	5.0%
		Reacto Print RP	1.0%
Water	XXX	Water	XXX

Recipe comparison for 100kg Paste for Rayon

CONVENTIONAL RECIPE		SUGGESTED RECIPE	
Ingredient	Dose%	Ingredient	Dose%
Sodium alginate / thickener	3-4%	Sodium alginate / thickener	3-4%
Resist Salt	1%	Resist Salt	1%
Sodium bi carbonate	3.5%	Sodium bi carbonate	3.5%
Urea	15%	Reacto print	9.0 %
		Reacto Print RP	2-3%
Water	XXX	Water	XXX