

# Neargal LU-SRV

Levelling agent for reactive,  
direct and vat dyes on  
cellulosic fibres.



*As uniform as two peas in a pod.*

*As easy as shelling peas.*



Untreated packages of yarn made with undyed cotton and cotton dyed with 2% C.I. Vat Red 13



Same yarn after attempt to level packages using  
4 g/l Competitive Product A  
25 ml/l caustic soda 38° Bé liq. } at 60° C for  
10 g/l sodium hydrosulphite } 45 minutes

Yarn packages after attempt to level shade of two different yarns using  
4 g/l Nearing LU-SRV  
25 ml/l caustic soda 38° Bé liq. } at 60° C for  
10 g/l sodium hydrosulphite } 45 minutes



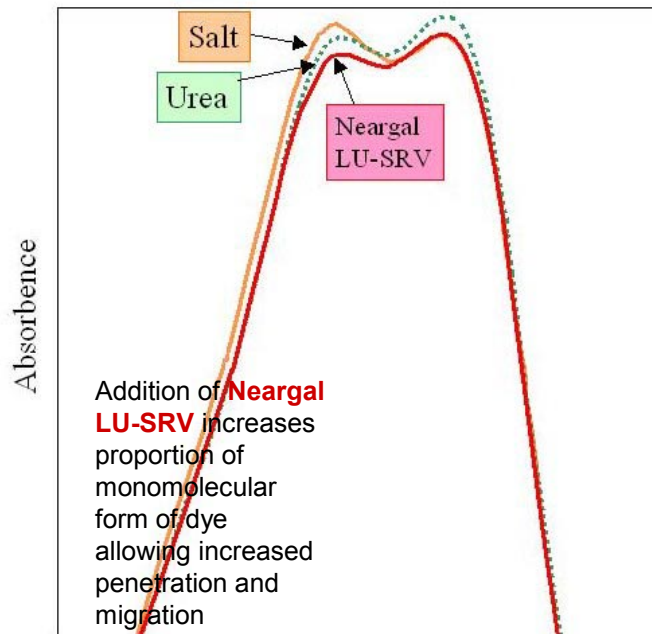
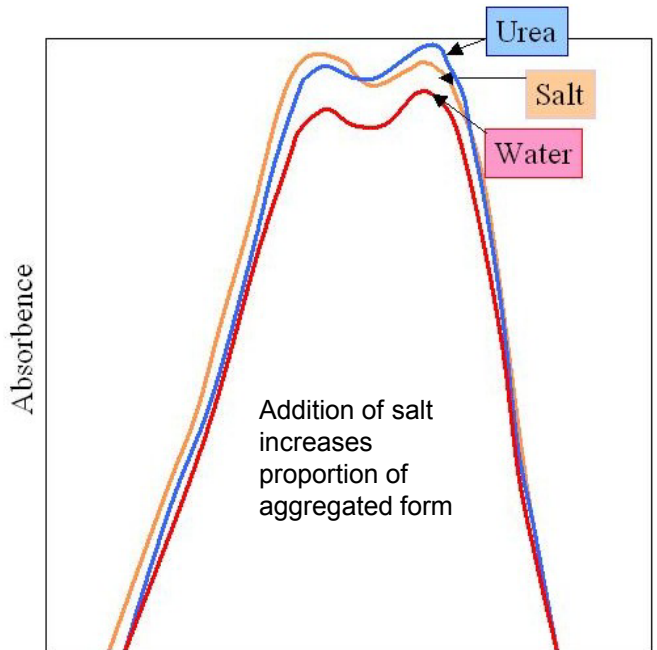
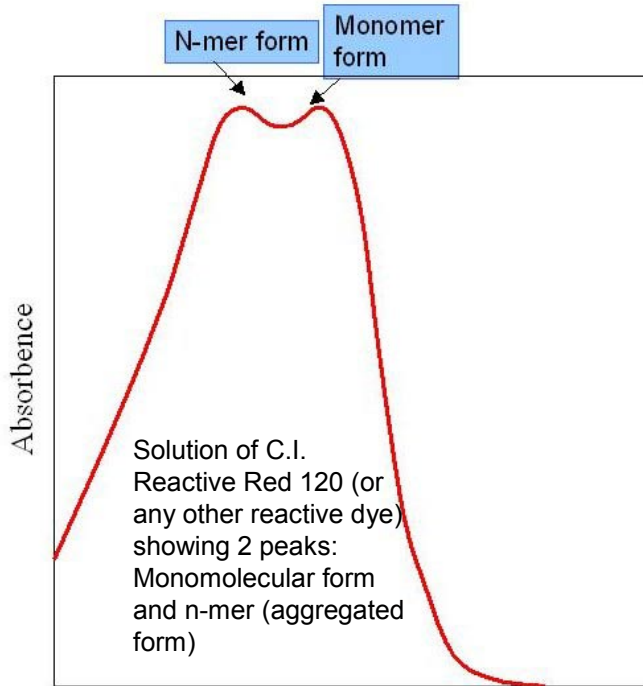
Here 4 g/l Nearing LU-SRV has been used to illustrate the effectiveness in correcting a dyeing that is already dyed unlevelly. In order to produce a level dyeing starting with undyed fibre, much lower concentrations can be used; 1 – 2 % with heavy shades, 2 – 4 % with pale shades.

With vat dyestuffs Nearing LU-SRV :

- assists migration of the leuco compound on the fibre before oxidation;
- preserves the vatted liquor in reducing condition for longer periods of time.

## With reactive and direct dyestuffs Neargal LU-SRV :

- reduces aggregation of the dye;
- increases proportion of dye in monomolecular form
- Adsorption of the dye in monomolecular form increases penetration and migration (before reaction)



## APPLICATION

### a) General.

**NEARGAL LU-SRV** may be used in package, beam, winch, jet, jig, or pad-mangle machines for levelling vat, reactive, direct or sulphur dyes. A large excess of the product, if used by accident, will not affect the dye yield obtained.

The generally recommended starting concentration ranges for initial trials are as follows:

Heavy shades	1 - 2 % owf <b>NEARGAL LU-SRV</b>
Medium shades	2 - 3 % owf <b>NEARGAL LU-SRV</b>
Pale shades	3 - 4 % owf <b>NEARGAL LU-SRV</b>

The addition of **NEARGAL LU-SRV** is made after any scouring or preparation stage, and **before** addition of the dyes.

### b) Package and beam dyeing machines.

1. Scour or bleach the goods as necessary and rinse as normal;
2. Refill with cold water and add

<b>NEARGAL LU-SRV</b>	1 - 4 % owf
Dye(s)	x % owf

Run 1 cycle cold

3. Proceed with normal/recommended dyeing process.

### c) Winch, overflow, and jet dyeing machines.

1. Prepare fabric and rinse as usual
2. Refill machine with cold water and add

<b>NEARGAL LU-SRV</b>	1 - 4 % owf
Dye(s)	x % owf

Run for 5 - 10 minutes cold

3. Proceed with normal/recommended dyeing process.

### d) Continuous pad application of dyes.

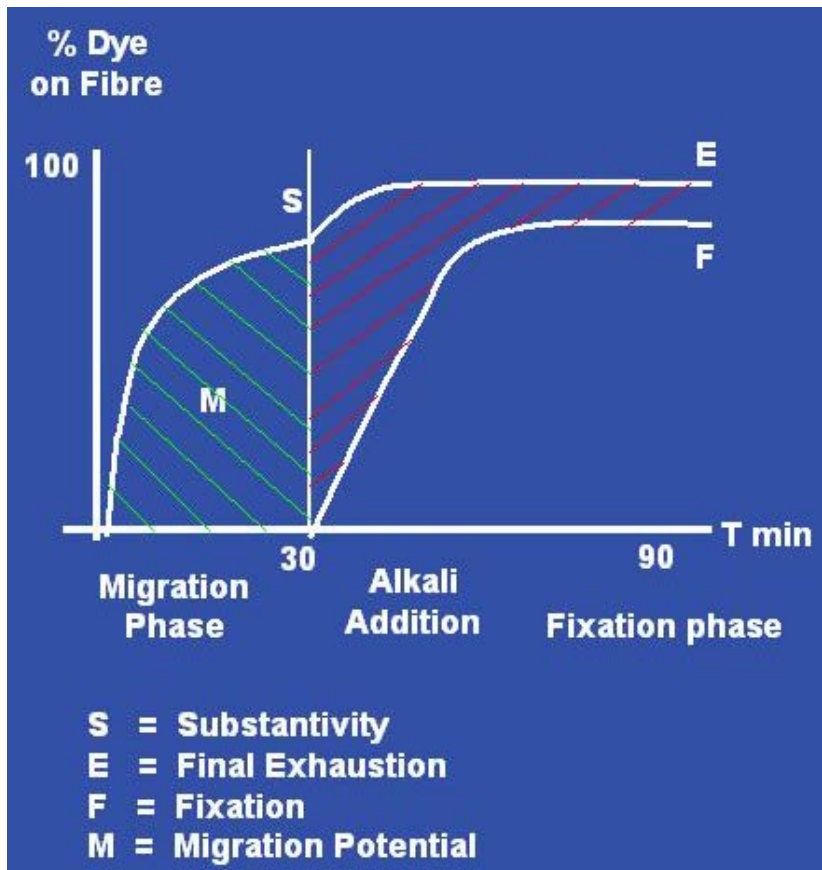
Add

<b>NEARGAL LU-SRV</b>	2 - 3 g/l
-----------------------	-----------

directly to the pad liquor containing the dye(s), then proceed with the normal process for the class of dyes in use.

The information and recommendations in this publication are to the best of our knowledge, information and belief accurate at the date of publication. Nothing herein is to be construed as a warranty, express or otherwise. In all cases, it is the responsibility of the user to determine the application of such information or the suitability of any product for their own particular purpose.

# Exhaustion of different reactive dyes



S = Substantivity

The amount of dye exhausted onto the fibre before the addition of fixation alkali under NEUTRAL dyebath conditions.

E = Exhaustion

The amount of dye exhausted onto the fibre under alkaline conditions after the addition of fixation alkali.

E – S

The difference between alkaline and neutral exhaustion.

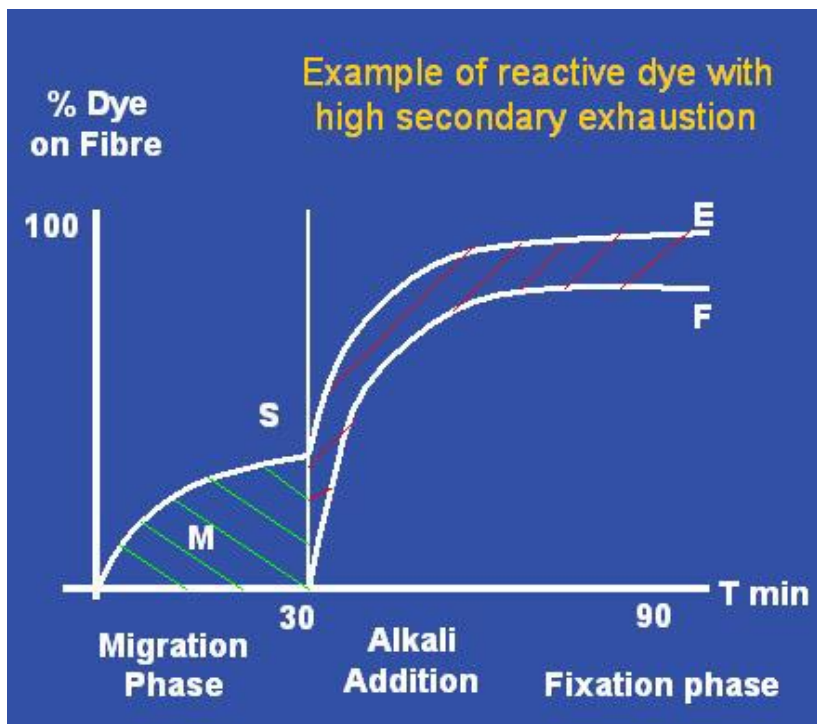
Sometimes called “secondary exhaustion”; or the “alkali kick”.

F = Fixation

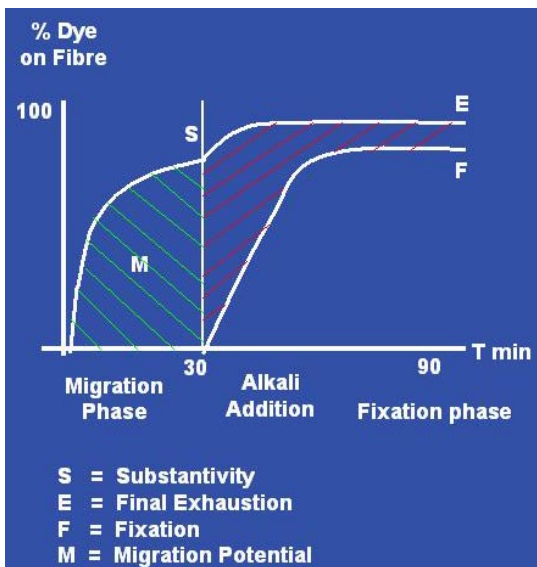
The dye which is covalently bonded to the cellulose fibre.

E – F

The amount of unfixed dye exhausted onto the fibre, and which must be removed by washing-off .



**NEARGAL LU-SRV** is particularly recommended as a levelling agent with those reactive dyes which exhibit a high exhaustion with electrolyte.



The disaggregating effect of **NEARGAL LU-SRV** during the migration phase, M, causes more of the dye to come to the fibre in the monomolecular form and therefore is able to penetrate more and is free to migrate more.

With the launch of **NEARGAL 5R**, Nearchimica is now able to offer a levelling agent that is specifically designed to operate with those reactive dyes that exhibit a high secondary exhaustion on addition of alkali for fixation.

