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## **SPECTRUM F DYES**

### **INSTRUCTION SHEET**

SPECTRUM F dyes are bifunctional reactive dyes primarily designed for dyeing cellulose fibres such as Cotton. They will also dye Silk, Wool and Nylon fibres, although not quite as efficiently. Cotton and Rayon fabrics are dyed in a HOT dyebath at 50-60°C with Soda Ash as the alkali fixative. Silk and Wool can be dyed at the same time but these fibres are damaged by alkali and hot water. Wool, Silk and Nylon are consequently dyed in a weakly acid dyebath (pH of 4.5-5.0) at 85-100°C.

**AS WITH ALL REACTIVE DYES SPECTRUM F DYES CAN CAUSE RESPIRATORY SENSITISATION OR IRRITATION - THEY SHOULD BE KEPT OUT OF REACH OF CHILDREN AND AVOID INHALATION, INGESTION, EYE & SKIN CONTACT.**

#### **DYEBATH REQUIREMENTS: *For COTTON & RAYON.***

FABRIC Dry Weight	WATER 20:1 - 30:1	DYE Pale Shade	DYE Heavy Shade	SALT* per Ltr	SODA ASH per Ltr
100g	2 -3ltr	0.5-1g	5-6g	25-60g	20-25g
500g	10-15ltr	2.5-5g	25-30g	25-60g	20-25g
1Kg	20-30ltr	5-10g	50-60g	25-60g	20-25g

PREDISSOLVE ALL DYEBATH ADDITIONS BEFORE ADDING TO DYEBATH.

\*SALT REQUIREMENT VARIES ACCORDING TO DEPTH OF SHADE.

#### **DYEBATH METHOD: *For COTTON & RAYON.***

Add salt and dye to warm/hot water and ensure they are properly dissolved and dispersed. Place fabric into the dyebath and raise the temperature to 50-60°C. Run the dyebath for 10-15 minutes, stirring fabric regularly. Move your fabric to one side and add the soda ash requirement. Run dyebath, maintaining the temperature at 50-60°C for another 15-20 minutes whilst stirring regularly.

A QUICK METHOD is to fill the dyebath with HOT water 60-70°C. Add salt and dye and ensure they are thoroughly dissolved and dispersed. Enter fabric and run dyebath for ten minutes, stirring regularly. Add soda ash requirement and continue dyeing for another 15 minutes, stirring fabric regularly. This method will not achieve the same depth of shade as the method above because dyebath is allowed to cool.

After the dyeing is completed remove fabric and rinse well in warm water, then wash fabric at least once in HOT SOAPY water. Rinse again in warm water, then cold rinse until water runs clear. It is important to wash fabrics well after dyeing to remove any loose dye. To remove loose dye thoroughly, use **Dynazol Washoff** at 1-2gms per litre. This is a product specifically designed for this purpose. Wash dyed fabric/garments separately first few times.

## SPECTRUM F DYES INSTRUCTIONS

### **DYEBATH REQUIREMENTS: *For SILK, WOOL & NYLON***

FABRIC Dry Weight	WATER 20:1 - 30:1	DYE Pale Shade	DYE Heavy Shade	ACID 30%* Gms per Ltr	TEXICOL SF* Gms per Ltr
100g	2-3 ltr	0.5-1g	5-6g	0.5-1g	1-3g
500g	10-15ltr	2.5-5g	25-30g	0.5-1g	1-3g
1Kg	20-30ltr	5-10g	50-60g	0.5-1g	1-3g

\*ACETIC ACID 30% or CITRIC ACID EQUIVALENT STRENGTH - WHITE VINEGAR MAY BE SUBSTITUTED BUT YOU WILL REQUIRE 6 TO 8 TIMES THE QUANTITY OF ACETIC/CITRIC ACID 30%.

\*TEXICOL SF WILL IMPROVE PENETRATION AND PICKUP OF DYE BUT IS OPTIONAL.

### **DYEBATH METHOD: *For SILK, WOOL & NYLON***

Add warm water (30°C approx), fabric and chemicals to dyebath and run for 5 minutes. If it is possible to check the pH it should be 4.5 to 5.0. Moving the fabric to one side add dye ensuring it is evenly dispersed and raise the temperature gradually to the boil (90-100°C) and run for 30-50 minutes, stirring gently but regularly. Be careful not to matt your wool! If the dye has not built up add another amount of acid (5g/ltr) and run the dyebath for another 20 minutes, stirring gently.

After the dyeing is completed remove fabric, allow to cool slightly then rinse well in warm water, then wash fabric gently at least once in HOT SOAPY water. Again be careful not to matt your wool. When rinsing DO NOT subject your fabric to extremes of temperature (i.e. hot to cold water). Rinse again in warm water, then cold rinse until water runs clear. It is important to wash fabrics well after dyeing to remove any loose dye. To remove loose dye thoroughly, use **HiTech WASHOFF** at 1-2gms per litre. This is a product specifically designed for this purpose. Wash dyed fabric/garments separately first few times.

If at any time you wish to shade the dyebath with more dye you should cool the dyebath to 50-60°C, add the shading dye then raise the temperature gradually to the boil and continue dyeing for 10-20 minutes. This will ensure a more even result.

*When dyeing wool you will find that some colours will build up better than others – Spectrum F dyes are primarily designed for cotton but will dye wool with varying degrees of success depending on the colour.*

The information herein summarises our present technical knowledge and experience with the product. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. It is advised that you perform a series of tests before commencing work on production runs or commercial output to assess the products suitability.