



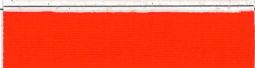
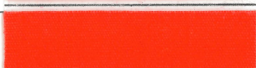
**Bodal Chemicals Ltd.**

COLOURS. INTEGRATION. INNOVATION.



Bodactive A New Definition Of Colour  
**BODACTIVE HE RANGE**  
For Cellulose Exhaust Dyeing



|                                                                                                                                        |                     |                                                                                      |                                                                                       |
|----------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <br><b>Bodal Chemicals Ltd.</b><br>BODACTIVE HE RANGE | STD<br>Depth<br>1/1 |                                                                                      |                                                                                       |
|                                                                                                                                        |                     | 2.0%                                                                                 | 4.0%                                                                                  |
| Bodactive Brilliant Yellow HE6G                                                                                                        | 3.5%                |    |    |
| Bodactive Brilliant Yellow HE4G                                                                                                        | 4.8%                |    |    |
| Bodactive Golden Yellow HERN                                                                                                           | 3.0%                |    |    |
| Bodactive Yellow HE4R                                                                                                                  | 2.5%                |    |    |
| Bodactive Orange HER                                                                                                                   | 1.6%                |    |    |
| Bodactive Orange HERG                                                                                                                  | 2.2%                |    |    |
| Bodactive Brilliant Red HE3B                                                                                                           | 2.9%                |    |    |
| Bodactive Brilliant Red HE7B                                                                                                           | 1.6%                |    |    |
| Bodactive Brilliant Red HE8BN                                                                                                          | 1.6%                |   |   |
| Bodactive Blue HEGN                                                                                                                    | 4.0%                |  |  |
| Bodactive Blue HERD                                                                                                                    | 4.0%                |  |  |
| Bodactive Turquoise Blue HEA                                                                                                           | 4.9%                |  |  |
| Bodactive Navy Blue HER                                                                                                                | 1.6%                |  |  |
| Bodactive Navy Blue HE2R                                                                                                               | 1.9%                |  |  |

### SALT AND ALKALI REQUIREMENTS FOR BODACTIVE HE DYES

| %Shade      | Glauber's Salt<br>Anhyd.(gpl) | Alkali         |                     |                    |
|-------------|-------------------------------|----------------|---------------------|--------------------|
|             |                               | Soda Ash (gpl) | Mixed Alkali System |                    |
|             |                               |                | Soda Ash (gpl)      | Caustic (50%) ml/l |
| Up to 0.5%  | 20                            | 10             | -                   | -                  |
| 0.51-1.0%   | 40                            | 10             | -                   | -                  |
| 1.1-2.0%    | 50                            | 15             | 5                   | 1.5-2.0            |
| 2.01-4.0%   | 60                            | 20             | 5                   | 2.0-3.0            |
| Above 4.00% | 70                            | 20             | 5                   | 4.0                |

#### Recommended Bodax Auxiliaries

##### Dye bath Auxiliaries in Exhaust Method

| Name of products        | Product description                                                                              | Dosage          |
|-------------------------|--------------------------------------------------------------------------------------------------|-----------------|
| Bodax PFE               | Dye bath conditioner and iron chelator                                                           | 0.25 to 0.5 gpl |
| Bodax VDBC              | Specially high temperature stable conditioner cum sequestrant                                    | 0.25 to 0.5 gpl |
| Bodax DRDL              | Economical Levelling agent                                                                       | 0.5 to 0.75 gpl |
| <b>Wash-off Agent</b>   |                                                                                                  |                 |
| Bodax DXCW              | Universal after soaping agent for the removal of hydrolysed Reactive dyes or unfixed Direct dyes | 0.5 - 1.0 gpl   |
| <b>Dye fixing Agent</b> |                                                                                                  |                 |
| Bodax DNF               | Economical non-formaldehyde dye fixing agent                                                     | 0.5 to 1.0 gpl  |

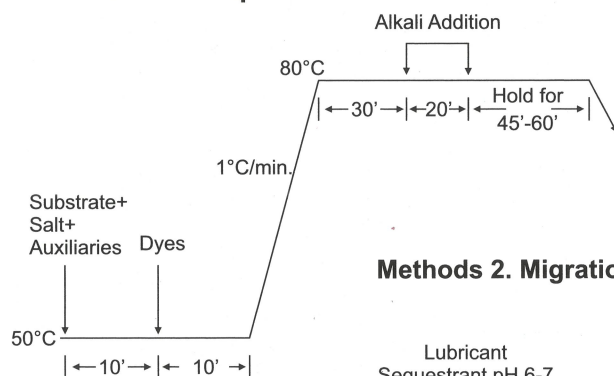
#### Key to Abbreviations

Y = yellower  
G = greener  
R = redder  
D = duller

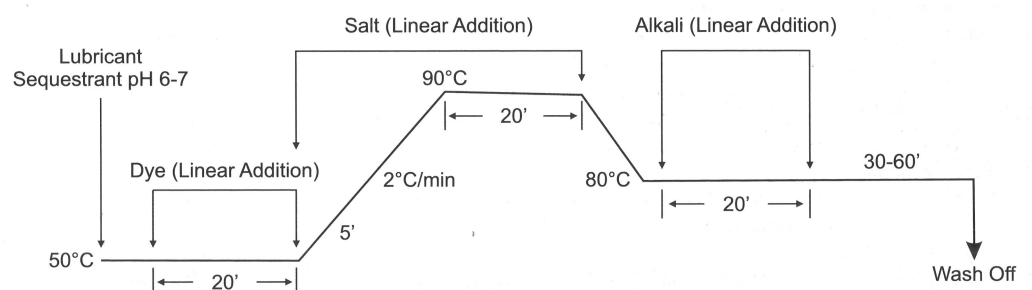
| General Properties |             | Fastness Properties  |                        |       |              |       |          |       |                                  |                            |       |
|--------------------|-------------|----------------------|------------------------|-------|--------------|-------|----------|-------|----------------------------------|----------------------------|-------|
| Solubility g/l     |             | Light<br>ISO-105-B02 | Washing<br>ISO-105-C03 |       | Perspiration |       |          |       | Chlorinated Water<br>ISO-105-E03 | Mercerising<br>ISO-105-X04 |       |
| 30°C               | 50°C        |                      |                        |       | ISO-105-E04  |       |          |       |                                  |                            |       |
|                    |             |                      |                        |       | Acidic       |       | Alkaline |       |                                  |                            |       |
| Water              | 50 g/l Salt | 1/1 S/D              | Effect                 | Stain | Effect       | Stain | Effect   | Stain | 20 mg/l Cl2                      | Effect                     | Stain |
| 60                 | 20          | 5                    | 4-5                    | 4     | 4-5          | 4-5   | 4<br>Br  | 4     | 3                                | 4<br>R                     | 4-5   |
| 50                 | 15          | 5                    | 4-5                    | 4     | 4-5          | 4-5   | 4        | 4     | 3                                | 4                          | 4-5   |
| 80                 | 60          | 5                    | 4-5                    | 4-5   | 4-5          | 4-5   | 4-5      | 4-5   | 3                                | 4                          | 4-5   |
| 70                 | 30          | 4                    | 4-5                    | 4-5   | 4-5          | 3-4   | 4-5      | 3-4   | 2-3                              | 4<br>G                     | 4-5   |
| 35                 | <10         | 3-4                  | 4                      | 4-5   | 3-4          | 4-5   | 4<br>Y   | 4     | 3                                | 4<br>G                     | 4-5   |
| 80                 | 25          | 3                    | 4                      | 4-5   | 4            | 4     | 4        | 4     | 3                                | 4                          | 4     |
| 80                 | 60          | 4-5                  | 4-5                    | 4-5   | 4-5          | 4-5   | 4-5      | 4     | 4                                | 4-5<br>Y                   | 4-5   |
| 100                | 80          | 3                    | 4                      | 4     | 4-5          | 4-5   | 4-5      | 4-5   | 4                                | 4-5                        | 4-5   |
| 80                 | 70          | 3                    | 4                      | 4     | 4-5          | 4-5   | 4-5      | 4-5   | 4                                | 4-5                        | 4-5   |
| 60                 | 50          | 5                    | 4-5                    | 4-5   | 4-5          | 4-5   | 4-5      | 4-5   | 2                                | 4<br>R,D                   | 4-5   |
| 80                 | 60          | 5-6                  | 4-5                    | 4-5   | 4-5          | 4     | 4-5<br>R | 4     | 3                                | 4<br>G,D                   | 4-5   |
| 60                 | 10          | 5-6                  | 4                      | 4     | 4-5          | 4-5   | 4        | 4-5   | 3                                | 4                          | 3     |
| 60                 | 40          | 3                    | 4-5                    | 4-5   | 4            | 4-5   | 4        | 4-5   | 3                                | 4-5                        | 4-5   |
| 60                 | 40          | 3                    | 4                      | 4     | 4-5          | 4-5   | 4-5      | 4-5   | 2-3                              | 4                          | 4     |

## DYEING METHODS

### Methods 1. Temperature Rise Method



### Methods 2. Migration Method





**Bodal Chemicals Ltd.**

COLOURS. INTEGRATION. INNOVATION.

E-mail : Dyestuff Division : [info@bodal.com](mailto:info@bodal.com),  
[dyestuff@bodal.com](mailto:dyestuff@bodal.com)

Dye Intermediates Division : [export@bodal.com](mailto:export@bodal.com)  
Other Chemicals Division : [ankitpatel@bodal.com](mailto:ankitpatel@bodal.com)

CIN: L24110GJ1986PLC009003

**Dyestuff Division**

**Nainan Mehta** : [nainan@bodal.com](mailto:nainan@bodal.com)  
Mobile : +91 99254 55544

**Hardik Shah** : [hardikshah@bodal.com](mailto:hardikshah@bodal.com)  
Mobile : +91 99254 88688

**Deepak Shah** : [deepak.bodal@gmail.com](mailto:deepak.bodal@gmail.com)  
Mobile : +91 98250 35271

**[www.bodal.com](http://www.bodal.com)**