



**ITOWOL**  
Reactive Dyes for Wool

**MAGNACOLOURS**<sup>®</sup>  
IMAGINATION INK<sup>®</sup>

# ITOWOL

## Reactive Dyes for Wool



ITOWOL reactive dyes are ideal as a more ECO friendly alternative to Mordant dyes. Covalent bonding of molecules gives them higher fastness properties than traditional acid milling dyes.

### FASTNESS TEST METHODS

The fastness properties were tested at 1/1 standard depths.

The fastness is given for unfixed wool.

<b>Light Fastness</b>	ISO 105-B02
<b>Wash Fastness</b>	ISO 105-C02
<b>Perspiration Fastness</b>	ISO 105-E02
<b>Water Fastness</b>	ISO 105-E01

### SYMBOLS USED IN FASTNESS COLUMNS

<b>C</b>	Staining on cotton
<b>N</b>	Staining on nylon
<b>W</b>	Staining on wool

### ITOWOL DYEING METHOD

#### Temperature Control Method - Typical method for Jet or Winch application:

- Set bath at 40°C
- Add 0.5% ITOQUEST LJ3-12
- Add 1-3% Itowol LJB
- Add 3% acetic acid
- Adjust pH (4.5 - 5.5)
- Add ITOWOL dyes linearly over 5 minutes (pre mixed at 80°C)
- Run 10 minutes
- Raise to 100°C (1-2°C/min)
- Run at temperature - pale shades 30 minutes, full shades 60 minutes
- When dye exhaustion complete, cool to 80°C (2°C/min)
- Add ammonia solution to give pH 8-8.5
- Run 15 minutes

To obtain best wet fastness after softening treatments, apply cationic fixing agent such as 1% ITOFIX EZF (40°C, 15 minutes)

#### pH control method - Typical for package, garment or half hose application:

- Set bath at 40°C
- Add 0.5% ITOQUEST LJ3-12
- Add 1% ITOWOL LJB
- Add 0.2% Acetic Acid
- pH check - 6.5
- Add x g/l glaubers galt (pale shades only to prevent skittery dyeing)
- Run 5 minutes
- Add ITOWOL dyes linearly over 5 minutes (pre mixed at 80°C)
- Run 5 minutes
- Raise to 80°C (2°C/min)
- Run 15 minutes - check seam penetration (run longer if not fully penetrated)
- Raise to 100°C (1°C/min)
- Run 10 minutes
- Add 0.5% acetic acid slowly - run 15 minutes
- Add 1% acetic acid slowly - run 30 minutes (pale shades) or 60 minutes (full shades)
- When dye exhaustion complete, cool to 80°C (2°C min)
- Add ammonia solution to give pH 8-8.5
- Run 15 minutes



# DISPERSE DYE RANGES



Range	Features
<b>ITOACID</b>	Disulphonated premetalised blacks .
<b>ITOLEVELLING</b>	Acid levelling dyes where levelness and penetration is important. Also contain fluorescent dyes.
<b>ITOMILLING</b>	Milling dyes for use for brighter shades with overall good fastness .
<b>ITOMILLING MF</b>	Metal free milling dyes
<b>ITOLAN</b>	Premetalised dyes where excellent wet and light fastness is required.
<b>ITOSET</b>	Synergistic range offering a compact compatible range for wool and nylon. Ideal for Wool/Nylon blends giving on tone balance in blends .
<b>ITOWOL</b>	Wool Reactive dyes for the brightest shades with the highest wet fastness .
<b>ITOCHROME</b>	Mordant dyes for high fastness, also give the best coverage on skittery wools .

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