



Farbstoffe | Dyestuffs

# Uni/CHim-Professional

## Tecofix Magic (KRF)

Innovative Reaktivfarbstoffe für ökonomische Färbungen

Innovative reactive dyestuffs for economical dyeing



| Tecofix                               | 0,5 % | 2 % | Xenonlicht<br>Xenon lamp<br>1/1 RTT/SD<br>1/6 RTT/SD | Wäsche<br>Washing<br>60 °C |     |     | Schweiss<br>Perspiration<br>acidic/sauer |    |     |     |     |    | KKV<br>Cold pad<br>batch | Chlorbadewasser<br>Chlorinated<br>bath water<br>20 mg/l |
|---------------------------------------|-------|-----|--|----------------------------|-----|-----|--|----|-----|-----|-----|----|--------------------------|---|
|                                       |       |     |  | N                          | CO  | CV  | N  | CO | PA  | N   | CO  | PA |                          |   |
| Magic Lemon KRF<br>Magic Lemon KRF    |       |     | 4-5<br>4   | 5                          | 5   | 5   | 5  | 5  | 5   | 5   | 5   | 5  | +                        | 2-3   |
| Magic Gelb KRF<br>Magic Yellow KRF    |       |     | 4-5<br>4   | 4-5                        | 4-5 | 4-5 | 5  | 5  | 5   | 5   | 5   | 5  | +                        | 3-4   |
| Magic Orange KRF<br>Magic Orange KRF  |       |     | 4-5<br>4   | 4-5                        | 4-5 | 4-5 | 4-5                                      | 5  | 5   | 4-5 | 5   | 5  | +                        | 3-4   |
| Magic Rot KRF<br>Magic Red KRF        |       |     | 4-5<br>4   | 4                          | 4-5 | 5   | 4-5                                      | 5  | 4-5 | 4-5 | 4-5 | 5  | +                        | 3-4   |
| Magic Karmin KRF<br>Magic Carmine KRF |       |     | 4<br>3   | 4                          | 5   | 5   | 4  | 5  | 5   | 4   | 5   | 5  | +                        | 3   |
| Magic Rubin KRF<br>Magic Rubine KRF   |       |     | 4-5<br>4   | 5                          | 4   | 4   | 4-5                                      | 5  | 5   | 4-5 | 5   | 5  | +                        | 4-5   |

| Tecofix   | 0,5% | 2% | Xenonlicht<br>Xenon lamp<br>1/1 RTT/SD<br>1/6 RTT/SD | Wäsche<br>Washing<br>60 °C |     |     | Schweiss<br>Perspiration<br>acidic/sauer |     |     |     |     |     | KKV<br>Cold pad<br>batch | Chlorbadewasser<br>Chlorinated<br>bath water<br>20 mg/l |
|---|------|----|--|----------------------------|-----|-----|--|-----|-----|-----|-----|-----|--------------------------|---|
|   |      |    |  | N                          | CO  | CV  | N  | CO  | PA  | N   | CO  | PA  |                          |   |
| Magic Brilliantblau KRF<br>Magic Brilliant Blue KRF |      |    | 6<br>5-6   | 4-5                        | 4-5 | 4-5 | 5  | 4-5 | 4-5 | 5   | 4-5 | 5   | +                        | 2-3   |
| Magic Ocean KRF<br>Magic Ocean KRF                  |      |    | 5<br>4-5   | 4                          | 5   | 4-5 | 5  | 4-5 | 4-5 | 5   | 4-5 | 4-5 | +                        | 2-3   |
| Magic Blau KRF<br>Magic Blue KRF                    |      |    | 5<br>4-5   | 4-5                        | 4-5 | 4-5 | 5  | 5   | 5   | 5   | 5   | 5   | +                        | 3   |
| Magic Dunkelblau KRF<br>Magic Dark Blue KRF         |      |    | 4<br>3   | 4-5                        | 4   | 4-5 | 5  | 4   | 4-5 | 5   | 4   | 4-5 | +                        | 4-5   |
| Magic Marine KRF<br>Magic Navy KRF                  |      |    | 4<br>3   | 4                          | 4-5 | 4-5 | 5  | 4   | 4-5 | 5   | 4   | 5   | +                        | 4   |
|   | 4%   | 6% | Xenonlicht<br>Xenon lamp<br>3/1 RTT 3/1 SD           | Wäsche<br>Washing<br>60 °C |     |     | Schweiss<br>Perspiration<br>acidic/sauer |     |     |     |     |     | KKV<br>Cold pad<br>batch | Chlorbadewasser<br>Chlorinated<br>bath water<br>20 mg/l |
|   |      |    |  | N                          | CO  | CV  | N  | CO  | PA  | N   | CO  | PA  |                          |   |
| Magic Schwarz KRF<br>Magic Black KRF                |      |    | 4-5  | 5                          | 5   | 4-5 | 5  | 5   | 4-5 | 4-5 | 4-5 | 4-5 | +                        | 3   |
| Magic Night KRF<br>Magic Night KRF                  |      |    | 4-5  | 5                          | 5   | 4-5 | 5  | 5   | 4-5 | 4-5 | 4-5 | 4-5 | +                        | 3   |

## **TECOFIX MAGIC KRF – Farbstoffe sind hochkonzentrierte polyfunktionelle Reaktivfarbstoffe.**

Sie zeichnen sich durch sehr hohe Fixiergrade aus und bilden während des Färbevorganges nur wenig Hydrolysat. Daraus resultiert eine leichte Auswaschbarkeit. Wasser und Chemie kann eingespart werden, speziell bei sehr dunklen Farben.

### **Erklärungen zu den Echtheiten**

N = Farbtonänderung

CO = Anbluten auf Baumwolle

WO = Anbluten auf Wolle

|                         |               |
|-------------------------|---------------|
| Lichtechtheit           | ISO 105 – B02 |
| Waschechtheit           | ISO 105 – C06 |
| Schweissechtheit        | ISO 105 – E04 |
| Chlorbadewasserechtheit | ISO 105 – E03 |

Die Echtheitsprüfungen wurden auf Färbungen in 1/1  
Richttypptiefe durchgeführt.

### **Zeichenerklärungen**

KKV-Eignung

+ Sehr gut

(+) bedingt

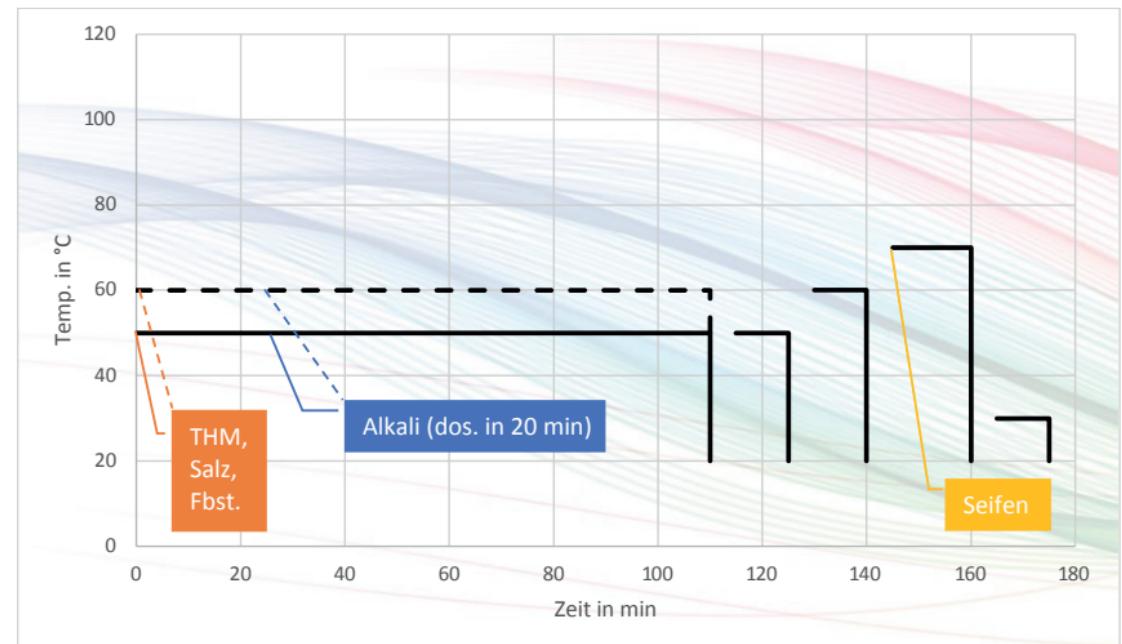
- nicht geeignet

Ätzbarkeit

● weiss ätzbar

○ bunt ätzbar

▲ nicht ätzbar





| KKV Verfahren  |                             |
|--|-----------------------------|
| Farbstofflösung  | Alkalilösung                |
| 4 Teile  | 1 Teil                      |
| g/L Farbstoff<br>3–8 g/L Alviron FLD<br>1–3 g/L TC-AirEx KA/KO | siehe untenstehende Tabelle |

## Ansetzen der Klotzflotte

Farbstoff- und Alkalilösung werden getrennt vorbereitet und über Dosierpumpen in das Foulardchassis zugesetzt. Vorteilhaft erweist sich dabei ein Verhältnis von 4 Teilen Farbstofflösung zu 1 Teil Alkalilösung. Die angegebenen Mengen beziehen sich immer auf das Gesamtvolumen der Flotte.

Die Klotzflottentemperatur sollte 25 ° C nicht überschreiten. Andernfalls sind die Alkalimengen anzupassen. Die Haltbarkeit der Klotzflotte variiert je nach Farbstoff- und Klotzflottenansatz. Die Verweilzeit ist an die Farbstoffe anzupassen.

| Gesamtmenge Farbstoff [g/L]                       | < 20 | 20  | 30  | 40  | 50   | 60  | 70  | 80  | 90  | > 100 |
|---|------|-----|-----|-----|------|-----|-----|-----|-----|-------|
| <b>Reduzierte Wasserglasvariante [&lt; 30° C]</b> |      |     |     |     |      |     |     |     |     |       |
| Wasserglas 38° Bé [mL/L]                          | 50   | 50  | 50  | 50  | 50   | 50  | 50  | 50  | 50  | 50    |
| Natronlauge 50° Bé [mL/L]                         | 13   | 13  | 15  | 16  | 18   | 20  | 22  | 22  | 22  | 22    |
| <b>Tropenvariante [&gt; 30° C]</b>                |      |     |     |     |      |     |     |     |     |       |
| Wasserglas 38° Bé [mL/L]                          | 100  | 100 | 100 | 100 | 100  | 100 | 100 | 100 | 100 | 100   |
| Natronlauge 50° Bé [mL/L]                         | 6    | 8   | 9,5 | 11  | 12,5 | 14  | 16  | 16  | 16  | 16    |
| <b>Soda/Lauge Verfahren</b>                       |      |     |     |     |      |     |     |     |     |       |
| Soda [g/L]  | 20   | 20  | 20  | 20  | 20   | 20  | 20  | 20  | 20  | 20    |
| Natronlauge 50° Bé [mL/L]                         | 5    | 5   | 6,5 | 8   | 10   | 12  | 14  | 15  | 17  | 19    |
| <b>TC-Fixierer DRF Verfahren</b>                  |      |     |     |     |      |     |     |     |     |       |
| TC-Fixierer DRF [mL/L]                            | 32   | 39  | 46  | 53  | 60   | 67  | 74  | 81  | 88  | 95    |

## **TECOFIX MAGIC KRF – dyestuffs are highly concentrated polyfunctional reactive dyes.**

They are characterized by very high fixing levels and form a small amount of hydrolysate, during the dyeing process. This results in easy wash-off properties. Water and chemicals can be saved, especially in very dark shades.

### **Explanation of fastness**

N = change of shade

CO = staining on Cotton

WO = staining on Wool

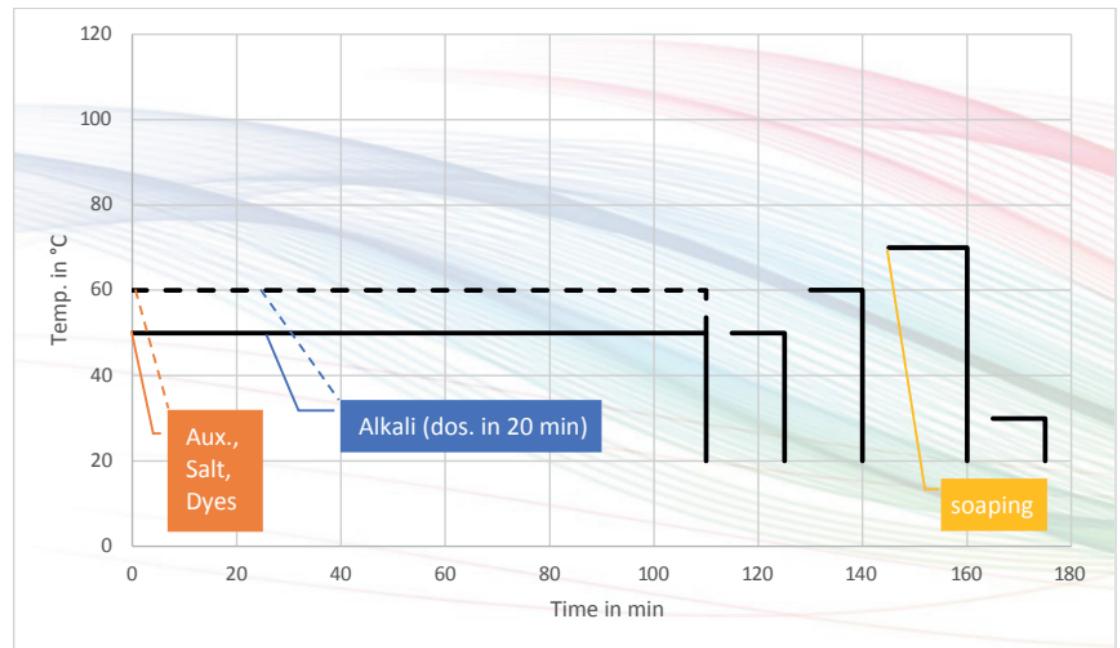
|                       |               |
|-----------------------|---------------|
| Light fastness        | ISO 105 – B02 |
| Washing fastness      | ISO 105 – C06 |
| Perspiration fastness | ISO 105 – E04 |
| Chlorinated water     | ISO 105 – E03 |

All fastness tests were carried out on dyeings in 1/1 standard depth.

### **legend**

CPB suitability  
+ very good  
(+ ) limited  
- not suitable

dischargeability  
● white  
○ still  
▲ not



| Application amounts of Salt and Alkaline in I.r. 10:1 |     |     |      |      |      |      |      |      | Caustic soda conversion factors |               |        |
|---|-----|-----|------|------|------|------|------|------|---------------------------------|---------------|--------|
| Dyestuffs up to ... [%]                               | 0.1 | 0.5 | 1.0  | 2.0  | 3.0  | 4.0  | 5.0  | 7.0  |                                 |               |        |
| Salt [g/L]  | 10  | 20  | 30   | 40   | 50   | 60   | 70   | 80   | 90                              | I.r.          | factor |
| <b>Alkaline:</b>                                      |     |     |      |      |      |      |      |      |                                 |               |        |
| Soda ash [g/L]  | 5   | 10  | 5    | 5    | 5    | 5    | 5    | 5    | 5                               | I.r.<br>1:2.5 | 1.40   |
| Caustic soda 50° Bé [mL/L]                            | -   | -   | 0.60 | 0.85 | 1.15 | 1.45 | 1.75 | 2.00 | 2.30                            | I.r.<br>1:5   | 1.20   |
| <b>or</b>   |     |     |      |      |      |      |      |      |                                 |               |        |
| Soda ash [g/L]  | 5   | 5   | 10   | 10   | 15   | 15   | 20   | 20   | 25                              | I.r.<br>1:10  | 1.00   |
| <b>or</b>   |     |     |      |      |      |      |      |      |                                 |               |        |
| TC-FIX and WASH RF [g/L]                              | 1.0 | 2.0 | 2.5  | 3.0  | 3.5  | 4.0  | 4.5  | 5.0  | 7.0                             | I.r.<br>1:10  | 0.80   |
|   |     |     |      |      |      |      |      |      |                                 |               |        |
|   |     |     |      |      |      |      |      |      |                                 |               |        |

The optimum pH range for dyeing with Vinylsulfone-/Polyfunctional combination anchor types is 10.8 – 11.2

## Use of auxiliaries:

### ALVIRON FLD

Anionic dispersing and dyestuff-solving agent for reactive dyeings on Cellulosics.

### TC-AirEx KA / KO

Highly effective wetting- and deaerating agent with excellent self-defoaming properties.

### TC-FIX and WASH RF

Special product for fixing and soaping reactive dyeings; not surface active.

## Optimisation of fastnesses:

In order to achieve optimum fastness properties, the dyeings must be thoroughly rinsed and, depending on the kind of soap, rinsed at 60 to 95°C.

After soaping, the dyeings must be rinsed and the pH adjusted. For highest fastness levels we recommend a cationic aftertreatment with Sevofix FFK.

## Correction of the quantities for salt at

| I.r.  | amount  |
|-------|---------|
| 1:2.5 | -20 g/L |
| 1:5   | -10 g/L |
| 1:10  | 0       |
| 1:10  | +5 g/L  |
| 1:20  | +10 g/L |
| 1:40  | +30 g/L |

An application rate of 5 g/L should not be undercut.

For the dyeing of mercerized cotton and viscose, we recommend a 10 g/L reduced amount of salt and the alkaline only with soda ash or TC-FIX and WASH RF.

| CPB process   |                                |
|---|--------------------------------|
| Dyestuff liquid   | Alkaline liquid                |
| <b>4 parts</b>  | <b>1 part</b>                  |
| g/L Dyestuff<br>3–8 g/L Alviron FLD<br>1–3 g/L TC-AirEx KA/KO | Take a look at the table below |

## Preparing the padding liquor

Dyestuff and alkali solution are prepared separately and added via dosing pumps in the padding chassis. A ratio of 4 parts of dye solution and 1 part of alkali solution proves advantageous. The quantities always refer to the total volume of the liquor.

The liquor temperature should not exceed 25°C. Otherwise, adjust the amounts of alkali. The durability of the padding liquor varies depending on the dye and pad liquor mixture. The dwelling time is to be adapted to the days.

| Total amount of dye [g/L]                    | < 20 | 20  | 30  | 40  | 50   | 60  | 70  | 80  | 90  | > 100 |
|--|------|-----|-----|-----|------|-----|-----|-----|-----|-------|
| <b>Modified silicate method [&lt; 30° C]</b> |      |     |     |     |      |     |     |     |     |       |
| Silicate of soda 38° Bé [mL/L]               | 50   | 50  | 50  | 50  | 50   | 50  | 50  | 50  | 50  | 50    |
| Caustic soda 50° Bé [mL/L]                   | 13   | 13  | 15  | 16  | 18   | 20  | 22  | 22  | 22  | 22    |
| <b>Tropical method [&gt; 30° C]</b>          |      |     |     |     |      |     |     |     |     |       |
| Silicate of soda 38° Bé [mL/L]               | 100  | 100 | 100 | 100 | 100  | 100 | 100 | 100 | 100 | 100   |
| Caustic soda 50° Bé [mL/L]                   | 6    | 8   | 9.5 | 11  | 12.5 | 14  | 16  | 16  | 16  | 16    |
| <b>Soda ash/Caustic soda method</b>          |      |     |     |     |      |     |     |     |     |       |
| Soda ash [g/L]                               | 20   | 20  | 20  | 20  | 20   | 20  | 20  | 20  | 20  | 20    |
| Caustic soda 50° Bé [mL/L]                   | 5    | 5   | 6.5 | 8   | 10   | 12  | 14  | 15  | 17  | 19    |
| <b>TC-Fixierer DRF method</b>                |      |     |     |     |      |     |     |     |     |       |
| TC-Fixierer DRF [mL/L]                       | 32   | 39  | 46  | 53  | 60   | 67  | 74  | 81  | 88  | 95    |