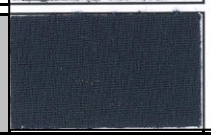
Tecodirekt **Tecodirect**	**0.5%**	**2%**	**C.I.** **Direct**	**Xenonlicht** **Xenon lamp** 1/12 RTT/SD 1/1 RTT/SD	**SDC**	**HT** **Eignung** **HT** **suitability**	**Wäsche** **Washing** **40 °C**			**Schweiss** **Perspiration** **alk./alk.**			**Schweiss** **Perspiration** **sauer/acid**			
							N	CO	WO	N	CO	WO	N	CO	WO	
Gelb 4GL 150% **Yellow 4GL 150%**			**Y 44**	**4** **4-5**	**A**	**-**	**3** **3-4**	**2** **2-3**	**4-5** **5**	**4** **4-5**	**2** **3**	**5** **5**	**4** **4-5**	**2** **3**	**5** **5**	**o.N./w.a.** **m.N./a**
Gelb L **Yellow L**			**Y 86**	**4-5** **6**	**B**	**(+)**	**3-4** **4-5**	**2-3** **3**	**4** **4-5**	**3-4** **4-5**	**3** **4-5**	**4-5** **5**	**3-4** **4-5**	**3** **4-5**	**4-5** **5**	**o.N./w.a.** **m.N./a**
Orange 2GL **Orange 2GL**			**O 39**	**4-5** **5-6**	**B**	**+**	**3-4** **4-5**	**2** **3**	**5** **5**	**4** **5**	**2** **4-5**	**4-5** **5**	**4-5** **4-5**	**2-3** **4-5**	**4** **5**	**o.N./w.a.** **m.N./a**
Orange 7GL **Orange 7GL**			**O 46**	**4-5** **6-7**	**B**	**+**	**3-4** **4**	**2-3** **3-4**	**4-5** **5**	**4** **4-5**	**2** **5**	**3-4** **5**	**4** **4-5**	**2** **5**	**3** **5**	**o.N./w.a.** **m.N./a**
Scharlach BNL 200% **Scarlet BNL 200%**			**R 89**	**3-4** **4-5**	**B**	**+**	**4** **4-5**	**3** **3-4**	**4-5** **5**	**4-5** **5**	**3** **4-5**	**4-5** **5**	**4** **5**	**3** **5**	**4-5** **5**	**o.N./w.a.** **m.N./a**
Rot 4G **Red 4G**			**R 23**	**3** **3-4**	**C**	**(+)**	**3-4** **4**	**2** **3**	**5** **5**	**4** **4-5**	**2-3** **4**	**4-5** **5**	**4** **4-5**	**2-3** **4-5**	**4-5** **5**	**o.N./w.a.** **m.N./a**
Rot 3BL 200% **Red 3BL 200%**			**R 80**	**3-4** **4**	**B**	**-**	**4** **4-5**	**3** **3-4**	**4-5** **5**	**3** **4-5**	**2** **4-5**	**4** **5**	**3** **4-5**	**2** **4-5**	**3-4** **4-5**	**o.N./w.a.** **m.N./a**

o.N./w.a. = ohne Nachbehandlung / without aftertreatment
m.N./a = mit kationischer Nachbehandlung / with cationic aftertreatment

Tecodirekt **Tecodirect**	**0.5%**	**2%**	**C.I.** **Direct**	**Xenonlicht** **Xenon lamp** 1/12 RTT/SD 1/1 RTT/SD	**SDC**	**HT** **Eignung** **HT** **suitability**	**Wäsche** **Washing** **40 °C**			**Schweiss** **Perspiration** **alk./alk.**			**Schweiss** **Perspiration** **sauer/acid**			
							N	CO	WO	N	CO	WO	N	CO	WO	
Rot 6BL 200% **Red 6BL 200%**			**R 79**	**4-5** **6**	**B**	**-**	**3-4** **4-5**	**2-3** **4-5**	**4-5** **5**	**4** **4-5**	**2-3** **4**	**4** **4-5**	**4** **4**	**2** **4**	**4** **4-5**	**o.N./w.a.** **m.N./a**
Rubin 3BL 300% **Rubine 3BL 300%**			**R 83**	**5** **6-7**	**B**	**(+)**	**3-4** **4-5**	**2** **3-4**	**4** **4-5**	**3** **5**	**2-3** **4-5**	**3-4** **5**	**3** **5**	**2-3** **4-5**	**4** **4-5**	**o.N./w.a.** **m.N./a**
Blau BL 200% **Blue BL 200%**			**B 71**	**4** **5-6**	**B**	**+**	**3-4** **4-5**	**3-4** **4**	**4-5** **4-5**	**3-4** **4-5**	**2-3** **4-5**	**4-5** **5**	**4** **4-5**	**3** **4**	**4-5** **5**	**o.N./w.a.** **m.N./a**
Blau 2GL 150% **Blue 2GL 150%**			**B 106**	**5** **6-7**	**B**	**+**	**2** **4**	**2-3** **3**	**4-5** **5**	**3** **4-5**	**1-2** **4-5**	**3** **5**	**3** **5**	**1** **4-5**	**2** **5**	**o.N./w.a.** **m.N./a**
Türkis FBL **Turquoise FBL**			**B 199**	**5** **6**	**B**	**+**	**3** **4-5**	**3-4** **4-5**	**5** **5**	**2-3** **4-5**	**1** **4-5**	**2** **4-5**	**2-3** **5**	**1-2** **4-5**	**2** **5**	**o.N./w.a.** **m.N./a**
Grün BL **Green BL**			**Gr 26**	**3-4** **5**	**B**	**+**	**4** **4-5**	**3-4** **4**	**4-5** **4-5**	**4-5** **5**	**2** **5**	**4-5** **5**	**4** **5**	**2-3** **4-5**	**4-5** **5**	**o.N./w.a.** **m.N./a**
Braun BL **Brown BL**			**Br 103**	**4** **5**	**B**	**+**	**3-4** **4-5**	**2-3** **4**	**5** **5**	**4** **5**	**3** **4-5**	**4-5** **5**	**4** **5**	**3** **4-5**	**4-5** **5**	**o.N./w.a.** **m.N./a**

o.N./w.a. = ohne Nachbehandlung / without aftertreatment
m.N./a = mit kationischer Nachbehandlung / with cationic aftertreatment

Tecodirekt Tecodirect	**0.5%**	**2%**	**C.I. Direct**	**Xenonlicht Xenon lamp** 1/12 RTT/SD 1/1 RTT/SD	**SDC**	**HT Eignung HT suitability**	**Wäsche Washing 40 °C** N	CO	WO	**Schweiss Perspiration alk./alk.** N	CO	WO	**Schweiss Perspiration sauer/acid** N	CO	WO	
Braun 2GL **Brown 2GL**			**Br 115**	**4** **5**	**B**	**-**	**4** **4-5**	**2-3** **3-4**	**5** **5**	**3-4** **5**	**2-3** **4-5**	**4-5** **5**	**4-5** **5**	**3-4** **4-5**	**4** **5**	**o.N./w.a.** **m.N./a**
Grau GL 250% **Grey GL 250%**			**Blk 112**	**4** **6**	**B**	**+**	**2-3** **4**	**2-3** **3-4**	**4-5** **5**	**2-3** **4-5**	**2-3** **4**	**4** **4-5**	**3** **4-5**	**2-3** **4**	**4** **4-5**	**o.N./w.a.** **m.N./a**

Tecodirekt Tecodirect	**2%**	**4%**	**C.I. Direct**	**Xenonlicht Xenon lamp** 1/12 RTT/SD 1/1 RTT/SD	**SDC**	**HT Eignung HT suitability**	**Wäsche Washing 40 °C** N	CO	WO	**Schweiss Perspiration alk./alk.** N	CO	WO	**Schweiss Perspiration sauer/acid** N	CO	WO	
Marineblau FGL 200% **Navy FGL 200%**			**B 85**	**4** **6**	**A**	**+**	**3** **4-5**	**2-3** **4-5**	**4** **4-5**	**4-5** **4**	**2** **3-4**	**4** **4-5**	**4** **4**	**2** **3-4**	**4-5** **4-5**	**o.N./w.a.** **m.N./a**
Schwarz UR 600% **Black UR 600%**			**Blk 22**	**-** **4**	**B**	**(+)**	**3-4** **4-5**	**2-3** **3-4**	**4** **5**	**4-5** **4-5**	**3** **4-5**	**4** **4-5**	**4-5** **5**	**3** **4-5**	**4** **4-5**	**o.N./w.a.** **m.N./a**
Schwarz B **Black B**			**Blk 80**	**-** **4**	**B**	**+**	**4** **4-5**	**1-2** **3**	**4-5** **5**	**4-5** **4-5**	**2-3** **4**	**4-5** **4-5**	**4-5** **4-5**	**2-3** **4**	**4-5** **4-5**	**o.N./w.a.** **m.N./a**

o.N./w.a. = ohne Nachbehandlung / without aftertreatment
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Tecodirect dyes are substantive dyes for the dyeing of cotton and regenerated cellulose fibres alone or in blends with synthetic fibres.
The field of application covers all different stages of processing from loose material to fabrics and knitwear.
The dyes are especially suitable for exhaust dyeing, selected products also for the different partially and fully continuous processes, like pad jig, pad batch, pad roll and pad steam.
The Tecodirect dyes distinguish themselves by good to very good light fastness with moderate to good wet fastness properties, especially after an aftertreatment of the dyeings with cationic aftertreatment agents.
Because of these properties the Tecodirect dyes are preferably used for the following articles: furnishing and upholstering fabrics, lining fabrics, ladies' outerwear, corduroy and velvet fabrics, knitted goods, coating articles.

SDC classification

Group A:

Tecodirect dyes which are not sensitive to salt with high migration property. Can be dyed without any special precautions.

Group B:

Tecodirect dyes with slightly poorer migration power than the dyes from group A. To obtain level dyeings, an even exhaust of the dyes must be achieved by means of a controlled addition of salt.

Group C:

Tecodirect dyes which are sensitive to salt with low migration property. A careful control of the temperature and salt addition are indispensable to obtain level dyeings.

Key to the fastness

N	=	change of shade	light fastness:	ISO 105 B02
CO	=	staining of cotton	wash fastness 40 °C:	ISO 105 C03
WO	=	staining of wool	fastness to perspiration:	ISO 105 E04

Comment to the fastness examinations:

In the light fastness the figures refer to the specified standard depths (1/12 resp. 1/1 SD).
The wash and perspiration fastness were tested in 1/1 SD, with navy and black in 2x1/1 SD.

HT suitability

In this column it is stated, if the dyes are suitable for HT dyeings between 120 °C and 130 °C. Suitability is given, when the HT dyeings show none or just little deviation in the shade and strength compared to the dyeings at the boil.

Key to the signs:
+ suitable
(+) little deviations of shade are possible depending on the time and temperature of the dyeing
- not suitable

Dyeing process

Pretreatment

For perfect dyeing results an efficient pretreatment is necessary.

Dissolving the dyes

The Tecodirect dyes are dissolved by pouring hot, soft water onto the dyes and stirring. With higher amounts of dyes a short boil up with a heating rod is recommended.

Bath exhaustion

The absorption of the dyes is controlled by the addition of salt and by the temperature. The amount of salt depends on the dye, depth of shade, liquor ratio and the material. To achieve perfect results it is recommended to add a levelling agent, especially under difficult dyeing conditions (material, dye machine).

Procedure (exhaust method at the boil)

- set bath at 30 – 50 °C (depending on the material, type of dyestuff and depth of shade) with:
  0.5 – 2 g/l Alviron S
  x g/l Glauber`s salt calc. or common salt
- after thorough distribution add the pre-dissolved Tecodirect dyes
- run for 5 – 10 min
- heat up to the boil (for regenerated cellulose fibre to 80 – 90 °C)
- run for 30 – 45 min
- cool slowly to 70 °C
- drain bath
- rinse warm (about 40 °C) and cold
- aftertreat

In case of levelling problems the salt must be added in portions during the heating-up phase and the heating-up must be controlled.

Cationic aftertreatment (to improve the wet fastness)

0.3 – 2 % Sevofix FFK
adjust pH 5.5 – 6.5 with acetic acid
treat 20 min at 30 – 40 °C

Recommendation of chemicals

Alviron S	Levelling agent for dyeing cellulose fibres with substantive dyestuffs in all application methods
Sevofix FFK	Formaldehyde-free aftertreating agent for dyeings with direct and reactive dyestuffs on cellulose and regenerated cellulose fibres