

# CONDITIONER FOR DYE BATHS



**ZS-DYESET RFT / RFT conc**

# ZSCHIMMER & SCHWARZ

**... THE SOLUTIONS PROVIDER**



Textile auxiliaries

ZSCHIMMER & SCHWARZ  
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Burgstädt / Germany

[www.zsm.de](http://www.zsm.de)





## ZS-DYESET RFT / RFT conc

### Application fields:

ZS-DYESET RFT / RFT conc is a multifunctional product which is used for:

- **dyebath conditioning for cotton, polyamide and polyester dyeing**

cotton:	direct, reactive, vat and sulphur dyeing
polyamide:	acid, disperse, metal complex, reactive and mixed dyes
polyester:	disperse dyeing

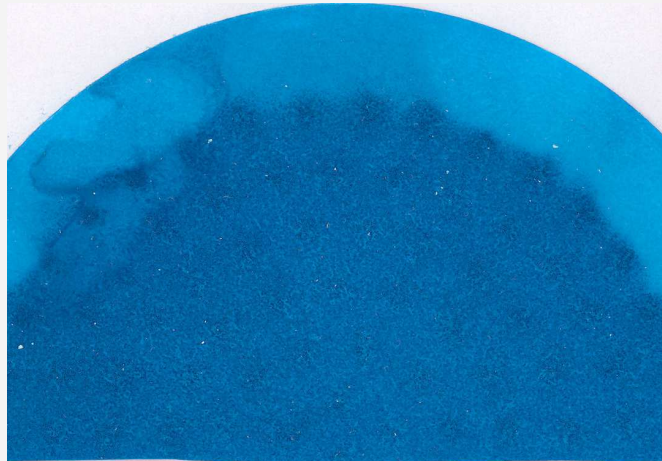
### Properties:

- dispersing
- sequestering of water hardness elements and heavy metals
- improvement of dyebath stability
- increases the reproducibility of the dyeings
- protective colloid
- no influence on the touch
- liquid
- free of foaming
- no demetallising of metal-containing dyestuffs even when higher quantities are applied
- facilitates detaching of the non-fixed reactive dyestuff and prevents its redeposition

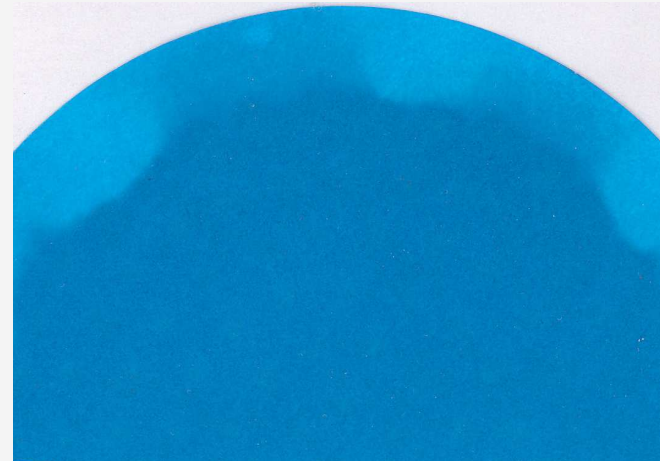
**ZS-DYESET RFT / RFT conc improves the process safety, the reproducibility and the „Right First Time“ level.**

## ZS-DYESET RFT / RFT conc as dispersing agent for reactive dyes

**Method:** filter test, vacuum filtration  
**Water hardness:** 15°German hardness  
**Recipe:** 6 g/l Remazol Turquoise Blue G 133%  
80 g/l Glauber's salt  
5 g/l soda ash  
2 ml/l NaOH 38°Bé



without dispersing agent



0.5 g/l ZS-DYESET RFT conc

## ZS-DYESET RFT / RFT conc as dispersing agent for disperse dyes

**Method:** filter test  
**Water hardness:** 10°German hardness  
**Recipe:** 0.5 g/l Foron Blue S-2RN  
0.5 g/l acetic acid 60%



without dispersing agent



0.5 g/l ZS-DYESET RFT conc



0.5 g/l SETAVIN PE +  
0.5 g/l ZS-DYESET RFT conc

**ZS-DYESET RFT / RFT conc as sequestering agent**

		<b>ZS-DYESET RFT conc</b>	<b>ZS-DYESET RFT</b>
<b>Ca – binding capacity [mg CaCO<sub>3</sub> / g product]</b>	pH 11	175	105
	pH 12	155	90
	pH 13	100	80

		<b>ZS-DYESET RFT conc</b>	<b>ZS-DYESET RFT</b>
<b>Fe – binding capacity [mg FE<sup>3+</sup> / g product]</b>	pH 11	400	190
	pH 12	110	60
	pH 13	60	50

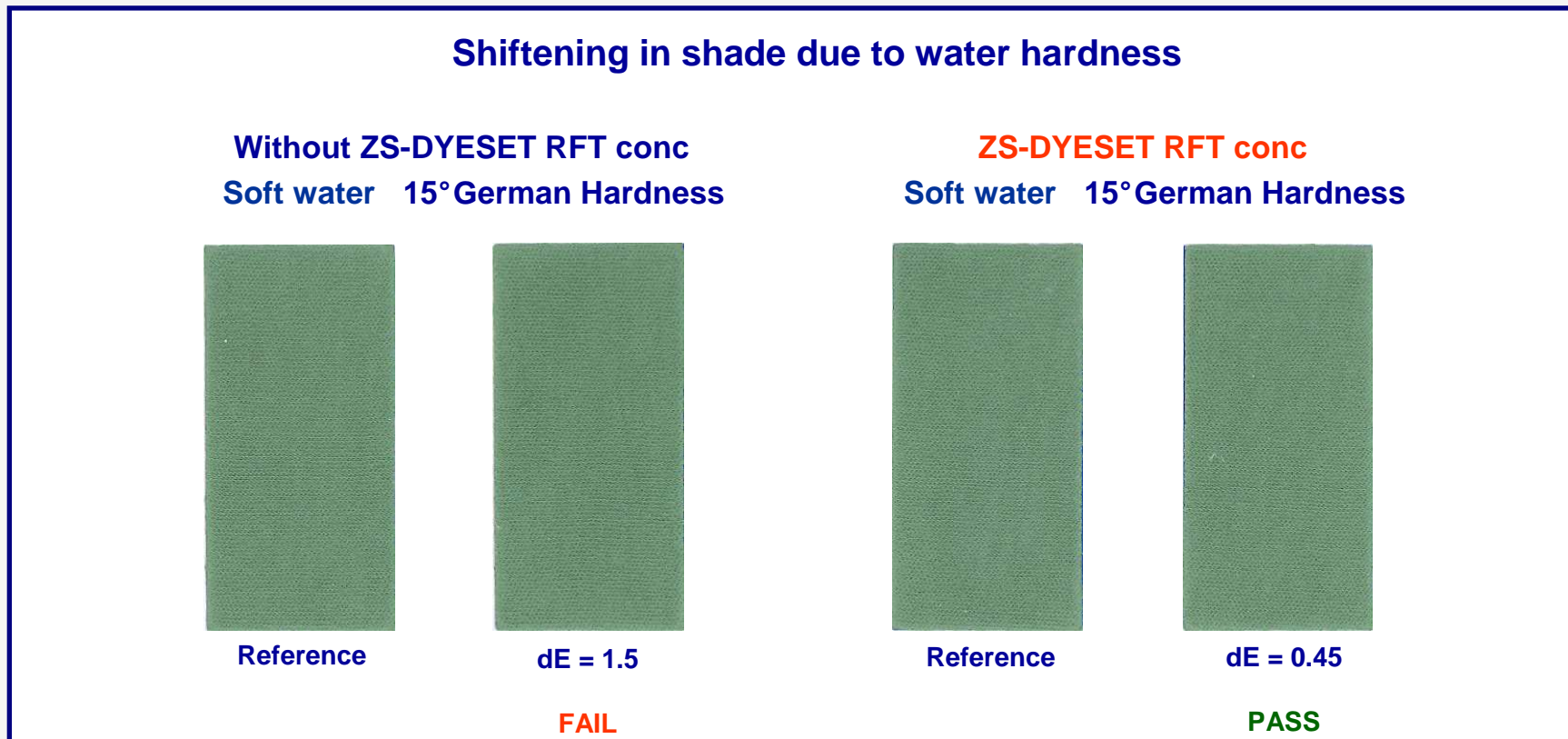


## ZS-DYESET RFT / RFT conc

Improvement of process safety, the reproducibility and the „Right First Time“ level.

Example exhaust dyeing cotton reactive in presence of water hardness:

- 1.0 g/l LUBATEX ECS (antcrease agent)
- a) without ZS-DYESET RFT conc
- b) 1 g/l **ZS-DYESET RFT conc**
- 50 g/l Glauber's salt
- 2.5 ml/l ALKASET AS
- 1.0 % Novacron Blue F-GFN
- 1.0 % Novacron Yellow F-4G



## ZS-DYESET RFT / RFT conc – high iron binding capacity

Example exhaust dyeing polyester in presence of iron ions:

1 g/l	CEFATEX ENN (deaerator)
0.2 g/l	LUBATEX LV conc (antcrease agent)
	a) without ZS-DYESET RFT conc
	b) 0.5 g/l <b>ZS-DYESET RFT conc</b>
0.5 %	SETAVIN PE (levelling agent)
0.5 ml/l	SETACID SN (acid buffer)
x %	dyestuff

### Shifting in shade due to iron ions in the dyeing bath - 0.5% Dianix Red E-FB

Soft water



Reference

Soft water and  
0.1 g/l  $FE^{3+}$  sulfate



dE = 1.8

FAIL

Soft water and  
0.1 g/l  $FE^{3+}$  sulfate and  
0.5 g/l ZS-DYESET RFT conc



dE = 0.60

PASS

## ZS-DYESET RFT / RFT conc as protective colloid

Example exhaust dyeing of polyamide/cotton in turquoise shade

