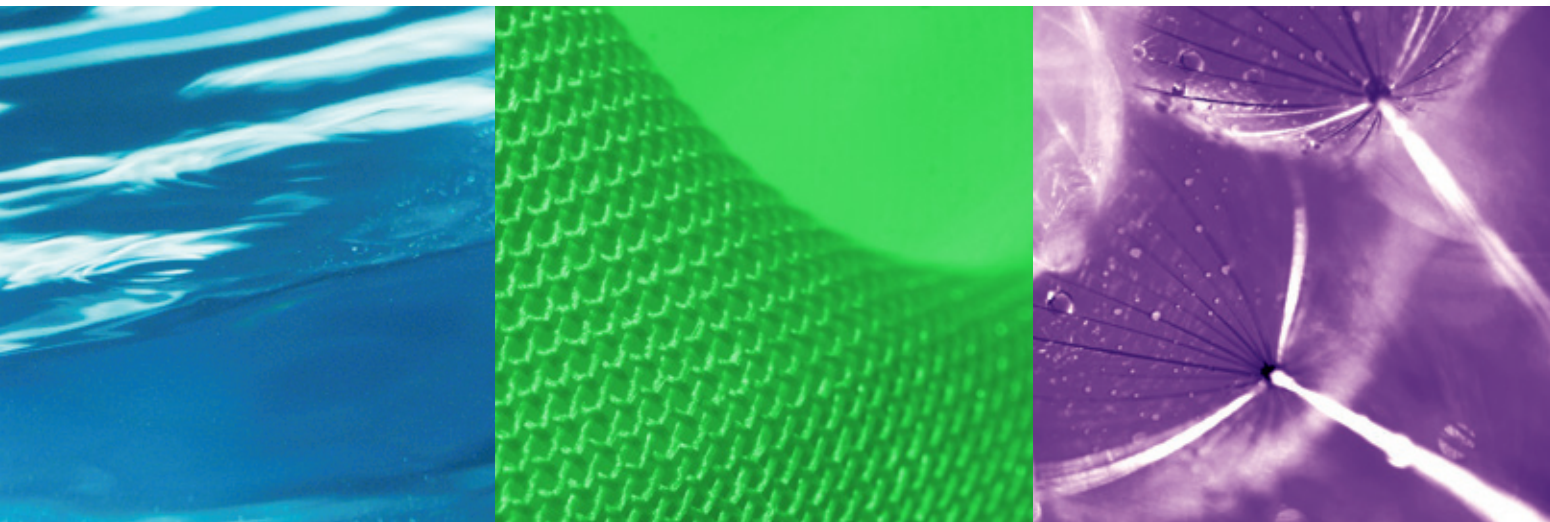


Textile Effects

TERASIL[®] TC

Excellent Right-first-time Performance for Polyester



Sustainability
Innovation
Collaboration

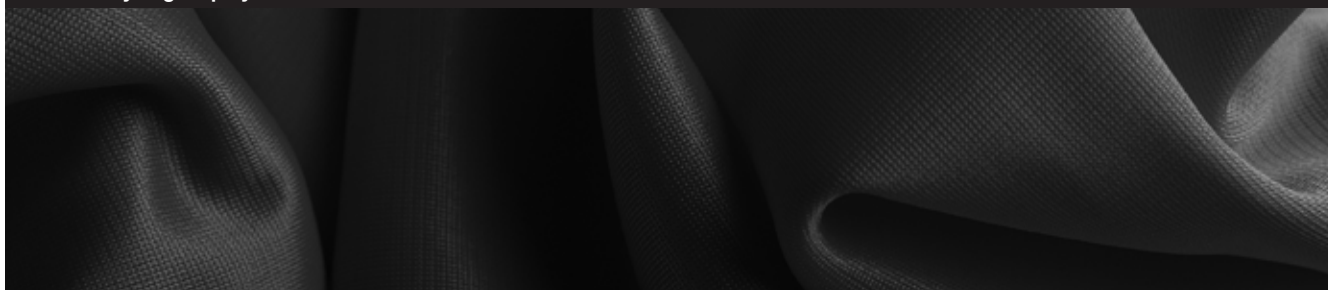
TERASIL® BLACK TC

Economical rapid dye with excellent shade reproducibility. Good all-round fastness.

HUNTSMAN

Enriching lives through innovation

Exhaust dyeing on polyester



Uses

Dyeing process

HT, standard	■
HT, rapid dyeing	■
HT, alkaline	■
CA	—
CTA	—
PES/WO	—
Thermosol	—
Direct printing	—



TERASIL® TC

Technology Competitive, cutting-edge
disperse dyes for polyester

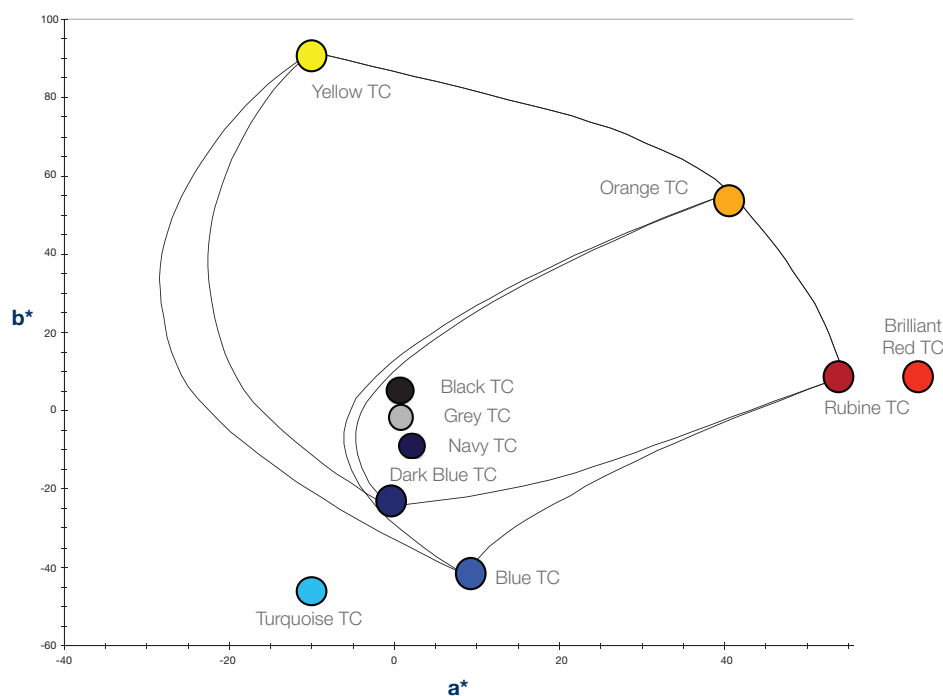


True to its name, TERASIL® TC is a Technology Competitive, cutting-edge disperse dye range for polyester. Designed to offer outstanding economy and shade reproducibility for polyester, polyester/cotton, even microfiber and elastane blends.

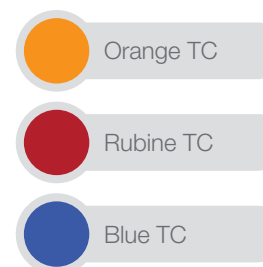
- Robust, economical and comprehensive disperse dye range for exhaust dyeing of polyester
- Right-First-Time performance through excellent compatibility of the dyes and stability to reduction
- Highest level of productivity in exhaust dyeing through excellent shade reproducibility
- Fulfills Oekotex requirements, bluesign® certified and meets all major brand RSL requirements

Range Benefits

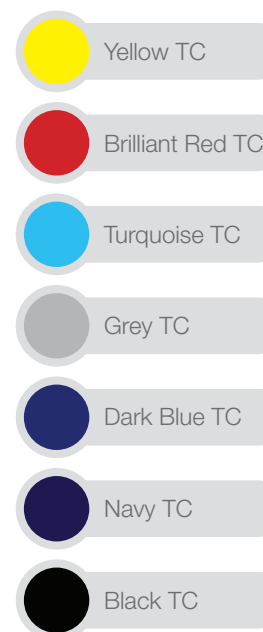
- Good all round fastness performance
- Excellent stability to reduction
- Exceptional leveling properties
- Very good light fastness providing high shade durability
- Fast exhaustion at 130° C
- Wide pH stability



Main Trichromatic dyes



Supplementary dyes





TERASIL[®] TC

Key Benefits

- Operational and Economical excellence
- Excellent right-first-time performance
- Fulfills Oekotex requirements, bluesign[®] certified and meets all major brand RSL requirements

■ Operational and Economical Excellence

Compatible dyes combination and uniform exhaustion

The similar shade on the fabric from the beginning to the end of the dyeing procedure ensures excellent leveling properties, shade reproducibility and reliability. Coupled with the highest degree of exhaustion, TERASIL[®] TC dyes are the choice for Operational and Economic excellence.

110°C	120°C	130°C 5 mins	130°C 60 mins	Conventional CI dyes
				Disperse Yellow 211 Disperse Red 73 Disperse Blue 165
				Residual dye in the bath

110°C	120°C	130°C 5 mins	130°C 60 mins	New state of the art technology
				TERASIL [®] Orange TC TERASIL [®] Rubine TC TERASIL [®] Blue TC
				Residual dye in the bath

Leveling properties and shade reproducibility

TERASIL[®] TC dyes provide the best lab to bulk reproducibility and levelness versus any conventional disperse dyes.







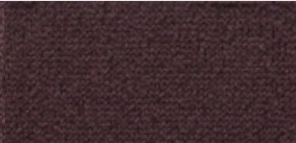

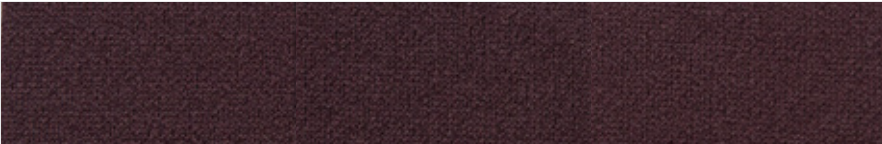
■ Excellent Right-first-time Performance

Stability to reduction

The cutting-edge technology in TERASIL® TC shows almost NO sensitivity to reduction during dyeing process.

Sensitivity to reduction of disperse dyes is the main cause of poor reproducibility. The main causes for reduction of disperse dyes are:

- Fully flooded dyeing machines (in absence of air)
- Polyester blended fabrics may carry reductive chemicals in dyebath, like wool, viscose, greige cotton
- Economical dispersing agents (sulphonated lignin) have a reduction effect

100% Texturized PES			
Fully-flooded dyeing machine without air	Dyeing machine which contains air	Fully-flooded dyeing machine + dispersing agent*	
			Conventional CI dyes
			Disperse Yellow 211
			Disperse Red 73
			Disperse Blue 165
Very poor deviation			
			Industry benchmark dyes
			Disperse Yellow Brown CC
			Disperse Rubine CC
			Disperse Blue CC
Slight deviation			
	New state of the art technology		
	TERASIL® Orange TC		
	TERASIL® Rubine TC		
	TERASIL® Blue TC		
No deviation			

*1 g/l dispersing agent based on sulphonated lignin.

pH stability

The wide pH stability of TERASIL® TC ensures highest reproducibility and Right-first-time performance.

- Shade not influenced by pH

	pH Variations	Reference pH 4.0	Relative Depth	da*	db*	
5.0			102	0.22	-0.07	New state of the art technology TERASIL® Orange TC TERASIL® Rubine TC TERASIL® Blue TC
6.0			103	0.08	-0.12	
7.0			103	0.23	-0.14	



TERASIL® Blue TC

TERASIL® TC

Highest level of productivity even under severe dyeing conditions.

■ Superior Lightfastness Performance

The high lightfastness of TERASIL® TC ensures durability against fading, even on microfiber. Tested according to Xenonlight ISO 105-B02 (blue scale) and Xenonlight AATCC 16E (gray scale).

		ISO 105-B02		AATCC 16 E 20 AFU	
Xenonlight	1/12 SD	4-5			4-5
	1/3 SD	4-5			4
	1/1 SD	4-5			4

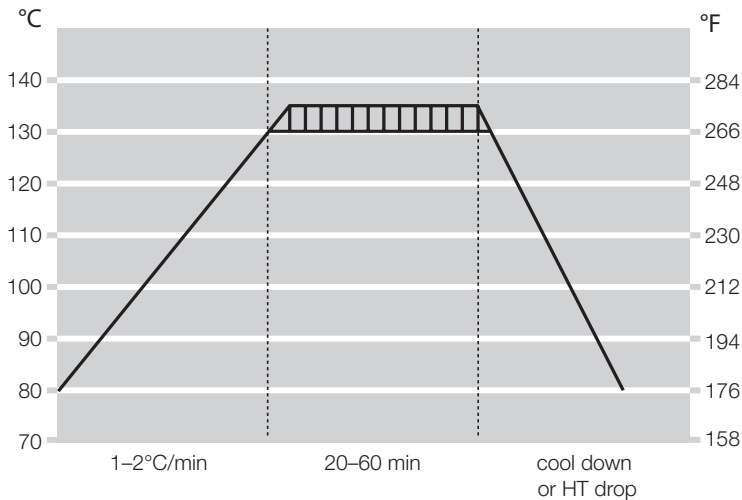
■ Migration During Fabric Storage

TERASIL® TC shows excellent fastness to storage due to outstanding fastness to dry heat.

Dry heat 30 seconds at 180°C	Standard	Ch	PES		CO	
TERASIL® Yellow TC TERASIL® Rubine TC TERASIL® Blue TC			4			5
TERASIL® Orange TC TERASIL® Rubine TC TERASIL® Blue TC			4			5
Disperse Yellow CC Disperse Rubine CC Disperse Blue CC			3-4			4-5
Disperse Yellow 211 Disperse Red 73 Disperse Blue 165			3-4			4-5

Exhaust Dyeing

Standard HT method



0.3–0.8 g/l	ALBAFLOW® UNI-01
0.5–1.0 g/l	UNIVADINE® TOP / E3-DAP
3.0 g/l	ALBATEX® RI
2.0–3.0 g/l	ALBATEX® AB-45
x %	TERASIL® dyes
pH 4.0	

Dyeing at 130–135°C/266–275°F for 20–60 min
(depending on depth of shade)

Reduction clearing

4.0 ml/l	caustic soda 36°Bé/66°Tw (40% w/v)
2.0 ml/l	sodium hydrosulfite conc. powder
1.0 g/l	ERIOPON® E3-SOP
10–20 min	at 70°C/158°F

Rinse and neutralize.

Dyeing Auxiliaries

ALBAFLOW® UNI-01

penetration accelerant

Versatile penetration accelerant with excellent deaerating, wetting and durable antifoam properties for dyeing and pretreatment applications on natural and synthetic fibers. APEO-and solvent free. Nonionic.

ALBAFLUID® E3-DLM

lubricant

An excellent dye bath lubricant for wet finishing of any fiber at all stages, ALBAFLUID® E3-DLM is particularly useful for fiber processing under difficult conditions including on short liquors, heavily loaded jets and in delicate goods processing.

ALBATEX® AB-45

acid buffer

No pH setting needed. Excellent buffer capacity and therefore high reproducibility with pH sensitive disperse dyes is assured. Anionic.

ALBATEX® RI

reduction inhibitor

ALBATEX® RI is a highly effective, halogen-free reduction inhibitor for dyeing of polyester fibers and their blends with, e.g. cellulose or viscose rayon. It protects disperse dyes from yield loss during HT exhaust dyeing processes.

ALBATEX® E3-DCC

protective colloid

An outstanding sequestering agent for reactive dyeing on cellulosic fiber and their blends, ALBATEX® E3-DCC is equally effective as a protective colloid for the dyeing of greige stage cotton and polyester/cotton blends. ALBATEX® E3-DCC is also a dyebath conditioner for cotton and a dye protectant for the dyeing and finishing of polyester fabrics.

ERIOPON® E3-SOP

afterclearing agent

An excellent after-clearing agent for dyed and printed polyester goods produced with disperse dyes, for polyester/cellulose blends with disperse/reactive dyes, for acetate and for polyester blends with elastane and wool, ERIOPON® E3-SOP is an outstanding product for continuous washing off and soaping for dyeing on open width washing machines, vat dye prints on all cellulosic goods and vat/disperse dyes on polyester / cotton blends.

UNIVADINE® E3-DAP

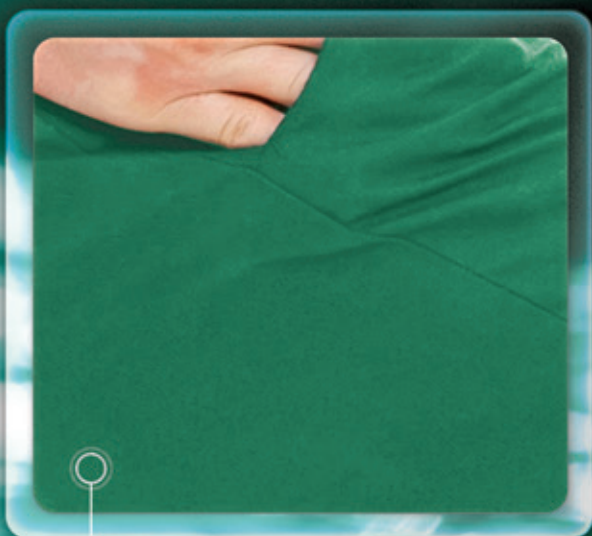
diffusion accelerant

A diffusion accelerant for HT dyeing of polyester fibres and microfiber blends at all stages in jets processing and circulating liquor machines, UNIVADINE® E3-DAP is excellent for dyeing polyester fibres in tightly wound or high-density package.

UNIVADINE® TOP

leveling and dispersing agent

Excellent leveling and dispersing effects. Good stability to electrolytes, preventing dye agglomeration. Good rubbing fastness. No dye retention. Reduces staining of cellulosic fabric. Anionic.



TERASIL® Blue TC



TERASIL® Yellow TC

TERASIL® TC

Technology competitive disperse dyes
for Polyester

Complies with OEKO-Tex 100 (inc. Class I) • Meets European standards
bluesign® approved – Meets requirements of brand RSL's (Restricted Substance Lists)





Learn more about
TERASIL® TC.

◀ Scan QR Code

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