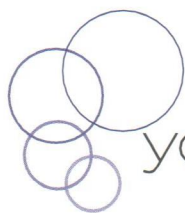


Intracid TX

dyes for wool & wool blends



yorkshire
G R O U P

Intracid TX dyes

Intracid TX dyes are Yorkshire's new, exciting "half milling" acid dyes. They are a versatile and compact range possessing good, all-round fastness properties and high levelling ability. They also ensure minimum environmental impact due to their "metal free" nature and provide outstanding tone on tone dyeings of wo/pa blends.

benefits of the Intracid TX range

- They are highly **robust** to processing variables, therefore providing enhanced reproducibility and maximising the potential for **right-first-time** dyeings.
- They possess **good all-round fastness properties**, with high light fastness and good fastness to most wet treatments, especially shampoo fastness (of particular importance to the carpet industry).
- They provide **good lab to bulk reproducibility** and due to their excellent exhaustion, **good bulk to bulk reproducibility**.
- They are dyed at (or around) the iso-electric region, with short dyeing times, therefore **minimising wool fibre damage** and providing optimum quality end products.
- They provide a **wide scope of application**, not only for dyeing wool, but also wool/polyamide blends, silk and the wool component in blends with polyester, cellulose and acrylic.
- They have an attractive **full shade gamut** to cover most fashion demands.
- They are suitable for application on a **wide variety of dyeing machinery**.

Intracid TX dyes – 100% wool

Intracid		
Yellow TX-G 1/3 SD, 1/1 SD		
Yellow TX-WPA 1/3 SD, 1/1 SD		
Yellow TX-RL 1/3 SD, 1/1 SD		
Red TX-GL 1/3 SD, 1/1 SD		
Red TX-3B 1/3 SD, 1/1 SD		
Green TX-BL 1/3 SD, 1/1 SD		
Blue TX-BLN 1/3 SD, 1/1 SD		
Blue TX-GL 1/3 SD, 1/1 SD		
Navy TX-RL 1/1 SD, 2/1 SD		
Black TX-BN 1/1 SD, 2/1 SD		

recommended combinations

Standard Trichromat

Intracid Yellow TX-RL

Intracid Red TX-GL

Intracid Blue TX-BLN

Wool/Polyamide (Carpet) Trichromat

Intracid Yellow TX-WPA

Intracid Red TX-GL

Intracid Blue TX-GL

Other combinable Intracid TX dyes

Intracid Yellow TX-G - Brighter "lemony" yellow

Intracid Red TX-3B - For wet fast, strong red shades

Intracid Green TX-BL - Basis for olive or bottle green shades*

Intracid Navy TX-RL - For fast and economical navy shades

Intracid Black TX-BN - Economical "metal-free" black with good all-round fastness*

*Not recommended for wo/pa blends.

wool/polyamide partition dyeings
















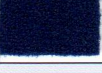
The compatibility of the wool/polyamide trichromat:-

Intracid Red TX-GL

Intracid Yellow TX-WPA

Intracid Blue TX-GL

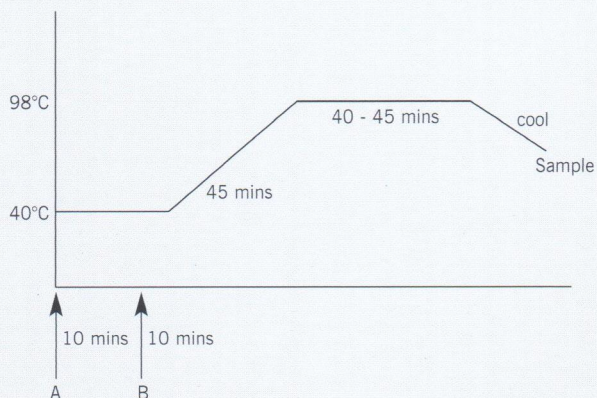
leads to exceptional tone on tone dyeings, not only on wo/pa carpets but also on both intimate and non-intimate wo/pa blends.

Intracid	1/1 SD	
	WO	PA
Yellow TX-G		
Yellow TX-WPA		
Yellow TX-RL		
Red TX-GL		
Red TX-3B		
Blue TX-GL		
Blue TX-BLN*		
Navy TX-RL		

The above dyeings were dyed using 80 parts wool and 20 parts polyamide 6.6, dyed in the same dyebath using the standard dyeing procedure with the addition of **Dyapol NDR**.

*Blue TX-BLN is illustrated at 1/3 SD, as it is not particularly suitable for wo/pa blends at 1/1 SD.

general dyeing method



A – 1% **Intratex CLW**

1g/l sodium acetate

pH 4.5 - 5.5 acetic acid

B – X% Intracid TX dyestuff

Raise to 40°C - add chemicals individually - run 10 mins

Add dye - run 10 mins - raise to 98°C over 45 mins

Run 40 mins at 98°C - exhaust with acetic acid if necessary

Cool to 70°C - sample

N.B. **Intratex CLW** is a mildly cationic levelling agent, which controls dye uptake and promotes migration with no reduction in final dyebath exhaustion.

Shading Additions

If shading additions are necessary, cool to 70°C - add diluted dyestuff - run 10 mins - raise to the boil over 20 mins - run 15-20 mins at 98°C - sample.

Correction of Faulty Dyeings

Pronounced unlevelness can be corrected using:

10-20% Glaubers' Salt

1-4% **Intratex CLW** - pH 6 - 20 mins at 98°C.

alternative dyeing methods

Low Temperature Dyeing

To further minimise wool damage, particularly for sensitive woollen items such as lambs wool, mohair, cashmere and alpaca, a low temperature method can be used. As general dyeing method - with the addition of 1-2% of a suitable low temperature dyeing auxiliary - run at a temperature of 80-85°C (instead of boiling) for 40-60 mins.

Dyeing Silk

As General Dyeing Method - except pH 5.5 - the addition of a dyebath lubricant 1cc/l **Serilube LCP** - run at 80-90°C for 40-60 mins

Dyeing Wool / Polyamide Blends

As general dyeing method - except with the addition of 6 - 0% **Dyapol NDR** (Polyamide retarder) - the higher amount for pale shades. When dyeing Wo/Pa blends it is recommended to add the **Dyapol NDR** and other chemicals, then run for 5 - 10 mins before adding **Intratex CLW**.

Dyeing Wool / PAC Blends

As general dyeing method - pH 4.5 - at 80°C - add 1cc/l **Dyamul AP** (anti-precipitant) - run 10 mins - add X% **Yoracryl** (Basic) dyes - run 10 mins - raise to 98°C at 1°C/min - run 30 mins at 98°C - add 2% formic (to minimise any cross staining) - run a further 20 mins - cool slowly - 1°C/min to 65°C - sample

Dyeing Wool / Cellulose Blends

As general dyeing method, except - add 1% **Dyapol SB40** - to minimise cross-staining - run 10 mins - add X% Intracid TX dyes, Y% **Intralite** (Direct) dyes - run 10 mins - raise to 98°C at 1°C/min - run 15 mins - add 5-20g/l Glaubers' Salt - (in 2-3 portions as necessary) - run a further 30 mins at 98°C - cool to 70°C - sample

If it is necessary to improve the wet fastness of the cellulosic portion of the blend - in a fresh bath add 2% Intrafix FF - pH 4.5 - 5, run 20 mins.

general dyeing notes

The use of acid donors are recommended when dyeing difficult to penetrate fibres. Increasing the pH of the dyebath increases migration and therefore the levelling ability of the dyes.

1cc/l **Intraslide ADF** is recommended (instead of using acetic acid), for a final dyebath pH of 4.5 - 5.0 or alternatively **Intraslide ADB** for a final dyebath pH of 5.5 - 6.5

For dyeing carbonised goods - cold rinse - raise to 40°C - add 3 - 5% Sodium Acetate - run 15 mins - refill - pH should be approx. pH 4.5 - 4.8 - add **Intratex CLW** - run 10 mins - add dye - continue dyeing cycle.




Reverse tippiness/skitteryness (fibre root dyeing deeper than the tip) can occur if dyeings take place at temperatures of 102°C and therefore 98°C is recommended as optimum dyeing temperature. The exception however is Intracid Red TX-3B which gives better results at 102°C.

further benefits of Intracid TX dyes

- They provide adequate fastness to subsequent additional processing e.g. high temperature decatizing, setting (using metabisulphite), carbonising, chlorination and light milling.
- Due to their "metal free" nature, Intracid TX's present no problems regarding extractable chromium from goods (and chromium in effluent), and are therefore fully compliant with Oeko Tex set levels concerning chromium.

compatibility tests trichromat - build up







These dyeings show the excellent compatibility and build-up of the Intracid TX trichromats and therefore highlight their maximum potential in achieving right-first-time dyeings and excellent reproducibility.

	Grey
60°C	
70°C	
80°C	
90°C	
98°C	
+40 mins 98°C	

Yellow TX-RL

Red TX-GL

Blue TX-GL

	Brown
60°C	
70°C	
80°C	
90°C	
98°C	
+40 mins 98°C	

Yellow TX-RL

Red TX-GL

Blue TX-BLN

fastness results

Intracid	Solubility at 90/90°C in g/l	Light Fastness Xenotest ISO 105-B02			Water Severe ISO 105-E01			Washing 40°C ISO 105-C01			Alkaline Perspiration SO 105-E04			Shampoo Tests On Wool (80) Polyamide (20) Carpet Yarns SDC-Test			Water Tests On Wool (80) Polyamide (20) Carpet Yarns		
		1/12	1/3	1/1	WO	CO	PA	WO	CO	PA	WO	CO	PA	WO	CO	PA	WO	CO	PA
Yellow TX-G	80	5-6	5-6	6	5	5	4-5	5	5	5	4-5	4-5	4-5	5	4-5	4-5	5	4-5	4-5
Yellow TX-RL	70	5	5-6	6	5	5	4-5	5	5	4-5	5	4-5	4-5	5	4-5	5	4-5	4-5	4-5
Yellow TX-WPA	80	5	5-6	6	5	5	4-5	5	5	5	5	4-5	4	5	4-5	4-5	5	4-5	4-5
Red TX-GL	60	4-5	5	6	5	5	5	5	5	4-5	4-5	5	5	5	4-5	4-5	5	4-5	4-5
Red TX-3B	100	-	3-4	4	5	5	5	5	5	5	5	4-5	4-5	5	5	4-5	4-5	5	4-5
Green TX-BL	50	5	5-6	6	5	5	5	5	5	5	4	4-5	4	4-5	4	5	4-5	5	4-5
Blue TX-GL	50	5	5-6	6	5	5	5	5	5	4-5	4-5	4-5	5	4-5	4-5	5	5	5	5
Blue TX-BLN	50	4	4-5	5-6	5	5	5	5	5	5	5	5	4-5	4-5	4-5	5	5	4-5	4-5
		-	1/1	2/1															
Navy TX-RL	100	6	7-8		5	5	4-5	5	5	4-5	4-5	5	5	5	4-5	4	4-5	4-5	4-5
Black TX-BN	80	6-7	7		5	5	5	5	5	5	5	5	5	5	5	4-5	5	5	5

All the above fastness tests except light fastness were carried out
on 1/1 Standard Depth Dyeings