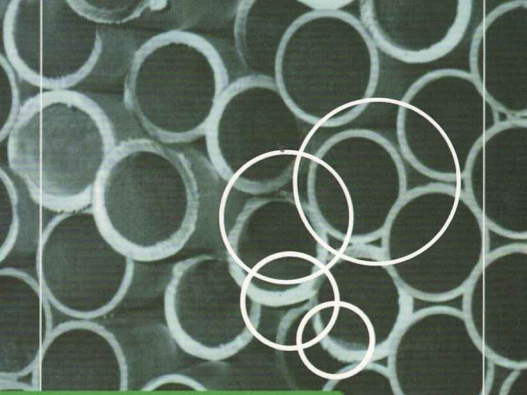


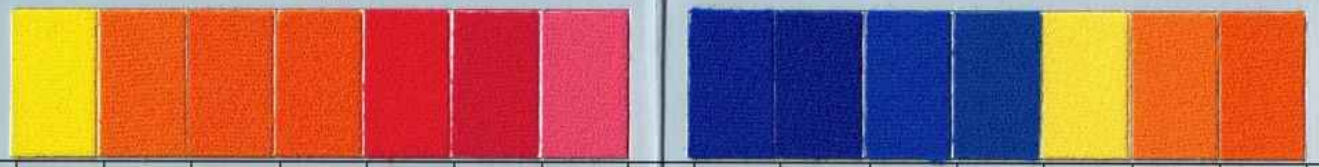
nylanthrene

dyes for polyamide

yorkshire

NYLANTHRENE DYESTUFFS
Polyamide

PA6.6



			Yellow* B-4NGL	Yellow B-4RKN	Yellow B-5R	Orange B-RG 80%	Red B-NG	Red B-2BSA	Pink B-LRF	Blue B-2RF	Blue B-NL	Blue B-AR	Blue B-2GL	Yellow* C-4GL	Yellow C-FLW	Yellow C-3RL
Concentration %			1.0	1.0	1.0	1.2	1.0	1.1	2.0	1.5	1.5	1.0	1.5	0.9	2.0	2.0
Solubility at 90℃ g/l			70	90	30	75	25	20	10	40	40	20	50	80	50	90
Artificial Light			R	R	R	R	Y	Y	Y	R	D	G	G	R	R	R
Lightfastness Xenotest ISO 105-B02		1/12	5	6	5 - 6	5 - 6	6 - 7	6	5	6 - 7	5 - 6	6 - 7	6 - 7	6 - 7	6	4 - 5
		1/3	6	6 - 7	6	6	6 - 7	6 - 7	6 - 7	7	5 - 6	6 - 7	6 - 7	7	7	6
		1/1	6 - 7	7	7	6 - 7	7	6 - 7	7	7 - 8	6	7	7	7	7 - 8	6
Water ISO 105-B01	N	SC	4 - 5	4 - 5	5	5	4 - 5	4 - 5	4 - 5	4	4	4	4	5	5	4 - 5
		PA	3 - 4	4	3	4	3 - 4	4 - 5	4	3	3 - 4	3 - 4	3 - 4	5	4	4
	A	SC	5	5	5	5	5	5	5	4 - 5	5	5	4 - 5	5	5	5
		PA	5	5	5	5	5	5	5	4 - 5	5	4 - 5	5	5	5	5
Washing 40℃ ISO 105-C06 A2S 1997 see note	N	SC	4 - 5	4	3 - 4	4	4	4	4 - 5	3 - 4	3	3 - 4	3 - 4	5	4	4
		PA	5	5	5	5	4 -5	4 -5	4 -5	4	4	4	4 - 5	5	4 - 5	5
	A	SC	5	5	5	5	5	5	5	4	4 - 5	4	4 - 5	5	5	5
		PA	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Alkaline Perspiration ISO 105-E04	N	SC	4 - 5	4 - 5	5	5	4 - 5	4	4 - 5	4	4	4 - 5	4	5	4 - 5	4 - 5
		PA	3 - 4	4	3	4	3 - 4	4	4	3	3	3	3 - 4	4 - 5	4	4
	A	SC	4 - 5	5	5	5	5	5	5	4 - 5	5	5	4 - 5	5	5	5
		PA	5	5	5	5	5	5	5	4 - 5	5	4	5	5	5	5
Sea Water ISO 105-E02	N	SC	5	4 -5	5	5	4 -5	4 -5	4 -5	4	4	4	4	5	4 - 5	4 - 5
		PA	3 - 4	4	3 - 4	4	3 - 4	4	4	3	3	3 - 4	3 - 4	5	4	4
	A	SC	5	5	5	5	5	5	5	4 - 5	5	4 - 5	4 - 5	5	5	5
		PA	5	5	5	5	5	5	5	4 - 5	5	5	5	5	5	5
Chlorinated Water (100mg/l act.Cl) ISO 105-E03	N	SC	4D	5	3DG	3Y	2 - 3	2 - 3	1 - 2	2 - 3D	3D	1WD	2 - 3D	3	4 - 5Br	4Br
	A	SC	4D	5	3DG	3Y	1 - 2	2 - 3	1 - 2	2 - 3D	3D	2WD	2 - 3D	3	4 - 5	4 - 5Br
	CW	SC	3R	4 - 5D	4 - 5	4Y	4Y	5	3 - 4	4	4	4D	4Y	3 - 4	3 - 4	4Br

Note

Wash test results for Nylanthrene B dyes are based on dyeings of 1:3 standard depth.

Wash test results for Nylanthrene C dyes are based on dyeings of standard depth.

NYLANTHRENE DYESTUFFS Polyamide

Orange C-SLF	Orange C-ALG	Red C-3BR	Red C-RA	Red C-2B	Red C-2RBL	Red C-B	Bordeaux C-B	Rubine C-5BL200	Violet C-B	Blue C-GLF	Navy C-RN	Black C-RF	Black C-WLX			
2.0	2.0	1.0	2.0	1.5	1.35	2.0	2.0	1.0	1.5	1.5	2.0	3.0	4.0		Concentration %	
60	30	30	25	30	100	30	35	40	50	70	100	80	80		Solubility at 90℃ g/l	
R	R	Y	Y	Y	Y	Y	Y	Y	DR	DR	D	G	R		Artificial Light	
4 - 5	4 - 5	3	3	5	4 - 5	3 - 4	5	4 - 5	5	5	-	-	-		1/12	Lightfastness Xenotest ISO 105-B02
5 - 6	5 - 6	4	3 - 4	6	5	3 - 4	6	5	5 - 6	5 - 6	-	-	-		1/3	
6	6	5	4	6 - 7	5-6	4	6 - 7	6	6	6	5 - 6	6	6 - 7		1/1	
4 - 5	5	4	5	5	4 - 5	5	4 - 5	4 - 5	5	4 - 5	4 - 5	4	5	SC	N	Water ISO 105-E01
4	4 - 5	3 - 4	5	4	4 - 5	5	4	4 - 5	5	4 - 5	4 - 5	3 - 4	4 - 5	PA		
5	5	5	5	5	5	5	5	5	5	5	5	4 - 5	5	SC	A	
5	5	5	5	5	5	5	5	5	5	5	5	4 - 5	5	PA		
4	4	4 - 5	5	4 - 5	4 - 5	5	4	4	5	4	4 - 5	4	5	SC	N	Washing 40℃ ISO 105-C06 A2S 1997
5	4 - 5	3 - 4	4 - 5	4 - 5	4	5	5	5	5	3 - 4	2 - 3	3	3	PA		
5	5	5	5	5	5	5	5	5	5	5	4 - 5	4	5	SC	A	see note
5	5	4 - 5	5	5	4	5	5	5	5	4	4	4 - 5	5	PA		
4 - 5	5	4	5	5	4 - 5	5	4 - 5	4 - 5	5	4 - 5	4 - 5	4	5	SC	N	Alkaline Perspiration ISO 105-E04
4	4 - 5	3 - 4	4 - 5	4	4 - 5	4	4	4	4 - 5	4 - 5	2	3	4	PA		
5	5	5	5	5	5	5	5	5	5	5	4 - 5	4	5	SC	A	
5	5	4 - 5	5	5	5	5	5	5	5	5	4 - 5	4	5	PA		
4 - 5	5	4 - 5	5	5	4	5	4 - 5	4 - 5	5	4 - 5	4 - 5	4	4 - 5	SC	N	Sea Water ISO 105-E02
4	4 - 5	3 - 4	5	4	4	5	4	4	5	4 - 5	4	4	4 - 5	PA		
5	5	5	5	5	5	5	5	5	5	5	5	5	5	SC	A	
5	5	5	5	5	5	5	5	5	5	5	5	4 - 5	5	PA		
4	2	4 - 5	4	3	2W	4 - 5	1	1	2 - 3	2G	3R	2 - 3R	3R	SC	N	Chlorinated Water (100mg/l act.Cl) ISO 105-E03
4	2	4 - 5	4	4	2 - 3W	5	1	1	3 - 4	2G	3R	2 - 3R	3R	SC	A	
4	3	4Br	4 - 5	5	5	5	3R	3R	4 - 5	3 - 4G	4R	4 - 5	5	SC	CW	

* May be catalytically faded by anthraquinonedyes(eg blues and greens) under certainconditions -see JSDC 108,1992,269

abbre viations

N	untreated
A	aftertreated (with 2% Dyapol SB40)
SC	shade change
PA	stain on polyamide
CW	aftertreated (with 5% Intratex CW)
B	blue
Br	brighter
D	duller
G	greener
R	redder
Y	yellow
W	weaker

recommended trichromats for apparel

For pale shades:

Nylanthrene Yellow B-5R
Nylanthrene Red B-NG
Nylanthrene Blue B-2RF

Nylanthrene Yellow C-3RL
Nylanthrene Red C-2RBL
Nylanthrene Navy C-RN

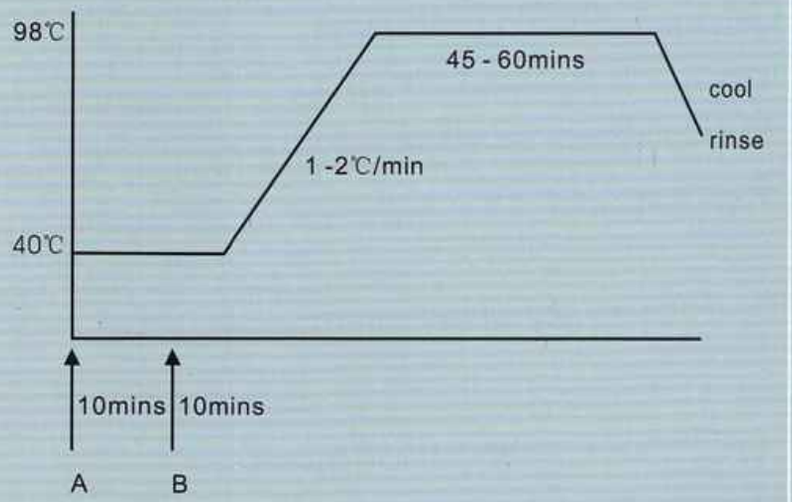
For maximum economy-medium/dull tertiary shades:

Nylanthrene Orange C-SLF
Nylanthrene Rubine C-5BL 200
Nylanthrene Navy C-RN

recommended trichromat for carpets

Nylanthrene Yellow B-5R
Nylanthrene Red B-2BSA
Nylanthrene Blue B-AR

Dyeing profile for nylanthrene b & c dyestuffs



A Intratex AL new
Ammonium Sulphate
Acetic Acid

B Nylanthrene Dyes

trichromats for swimwearl

For pale to medium shades:

Use Nylanthrene B trichromat for

- excellent levelling
- excellent compatibility
- excellent migration properties

Recommended trichromat

Nylanthrene Yellow B-5R
Nylanthrene Red B-NG
Nylanthrene Blue B-2RF

For medium to dark shades:

Use Nylanthrene C trichromat for higher wet fastness

Recommended trichromat

Nylanthrene Yellow C-3RL
Nylanthrene Red C-2RBL
Nylanthrene Blue C-GLF

Improvement in chlorine fastness

Fastness to chlorinated water can be significantly improved by aftertreating with Intratex CW

Method:
Set bath at 40℃ with 4% **Intratex CW**
Adjust to pH 4.0-4.5 with acetic acid
Raise to 70℃ at 2-3℃/minute
Run for 20 minutes
Cool and rinse

general exhaust dyeing method

Preparation

- Alkaline scour
  1ml/l **Dyamul SLX New**
  2g/l sodium carbonate
  60℃ for 20 minutes

General Dyeing Method

	Shade	Intratex AL New	Ammonium Sulphate
Nylanthrene B	light	2.0 - 1.0%	
	medium	1.0 - 0.5%	1.0 - 2.0g/l
Nylanthrene C	medium	2.0 - 1.0%	
	dark	1.0 - 0.5%	1.0 - 2.0g/l

- Start bath at 40℃with **Intratex AL new**, ammonium sulphate - pH 5-6 with Acetic Acid.
- Add the dissolved dyestuffs.
- Run for 15 minutes and check the pH.
- Raise to 98℃ over 30-40 minutes and dye for 30-60 minutes at that temperature.
- If necessary complete exhaustion by adding further acetic acid.

Aftertreatment

- In a fresh bath with:-

  2% **Dyapol SB-40** at pH 4.5 with acetic acid at 60 - 70℃ for 20 minutes.

Auxiliares

DYAMUL SLX New is an **APEO** free low foaming multi-purpose detergent designed to give an excellent combination ofwetting and detergencyacross a wide range of application conditions.

Intratex AL new is a cationic levelling agent with anti-Barréproperties and is recommended for producing level dyeings with minimum barréness.

Dyapol SB-40 is a powerful syntanning agent recommended for improving the wet fastness of acid and metal complex dyes.

nylanthrene dyes

Nylanthrene dyes are ideally suited to the dyeing of polyamide 6 or 6.6.

They can be used in neutral, or even alkaline dyebaths, in order to ensure outstanding levelness.

Their very good migration properties assure an excellent coverage of barréness.

They have high light and wet fastnesses.

Nylanthrene B dyes give:

- the best level dyeing
- the best coverage
- the best migration

Nylanthrene C dyes give:

- the highest levels of wet fastness