

Product Introduction

Moderdirect Supra range

Moderdirect Supra dyes belong mainly to the salt controllable type as per S.D.C. classification, suitable for dyeing of cellulose fibres.

Recommended three-color combination for high fastness :

- Moderdirect Supra Yellow PG
- Moderdirect Supra Red BWS / Rubine BL
- Moderdirect Supra Blue 4BL / Grey 3BL

Recommended three-color combination for economical shade :

- Moderdirect Supra Yellow RL
- Moderdirect Supra Red BWS
- Moderdirect Supra Blue 4BL / Blue 4G / Blue BRL

Recommended three-color combination for pale shade and good fastness :

- Moderdirect Supra Yellow PG
- Moderdirect Supra Rubine BL
- Moderdirect Supra Blue 4BL

ModerDirect Supra[®]

	Yellow PG	Yellow RL	Orange 2GL	Scarlet F2G	Scarlet 3BSL	Red ME	Red BWS	Red 4B	Rose FR	Rubine BL	Blue BRL	Blue BRN	Blue 4BL	Blue 4G	Turq.Blue FBL	Brown GTL	Grey CGL	Grey 3BL	Black VSF																					
Dyeing depth(%o.w.f.)	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4																				
Solubility (80°C,g/l)	50	80	100	40	25	100	100	80	100	70	40	40	50	70	10	80	70	80	25																					
S.D.C. Classification	B	B	B	B	C	B	B	B	B	B	B	B	B	B	B	B	B	B	B																					
Optimum affinity Temp. °C	60-70	90	80	90	80-100	80	80	80	90	100	80-95	80-95	80-95	65-70	95	70	60-90	90	80-95																					
Suitability for High Temp. dyeing	C	C	C	C	C	B	B	B	A	B	B	B	B	B	B	B	B	A	B																					
Fastness to Light	non	Fix	non	Fix	non	Fix	non	Fix	non	Fix	non	Fix	non	Fix	non	Fix	non	Fix	non	Fix	non	Fix	non	Fix																
	4-5	4-5	5	4	6-7	5	3-4	3	2-3	2	4-5	3	4	3	3	1	7-8	5	5-6	4	5-6	4	7	4-5	6	5	6	5-6	5	3	6-7	6	7-8	7	5-6	5				
Fastness to washing ISO 105-C02	Change of Shade		3-4	4	4-5	4-5	4	4-5	3	4	5	5	4-5	5	4-5	5	4-5	4-5	4-5	4-5	4-5	3	4-5	3-4	4-5	3	4	4-5	5	3-4	4-5	4	4-5	5	5					
	Staining on Cotton		3	3	3	4	2	4	1	1-2	2	2-3	3	3	3	3	1	4	1	3-4	2	4-5	2	4-5	1-2	4-5	1-2	3	4	4-5	3	3	2-3	4-5	2	4-5	2-3	2-3		
	Staining on Nylon		5	5	4-5	4-5	4-5	4-5	4	4-5	4	4	4-5	5	4-5	5	4-5	5	4-5	4-5	4-5	4-5	4	4-5	3-4	5	5	5	3	3	4-5	4-5	4	4-5	4-5	4-5	4-5			
Fastness to water ISO 105-E01	Change of Shade		3-4	4-5	4	4-5	4-5	4-5	5	5	5	5	5	5	5	4	5	4-5	4	4-5	3-4	4	3	4-5	4	4-5	4	4-5	4	4-5	4	4-5	4	4-5	4-5	5				
	Staining on Cotton		2-3	5	3	5	2-3	5	3	4-5	3	4-5	1-2	5	1-2	5	2-3	5	1-2	4-5	2-3	4-5	2	4-5	2	4-5	2	5	2	4-5	2-3	4	1-2	4-5	2	4-5	4	4-5	3-4	4-5
	Staining on Nylon		4-5	5	4	4-5	2-3	5	3-4	4-5	4	5	4-5	5	4-5	5	4-5	5	1-2	4-5	3	4-5	3	4-5	3	5	3	4-5	3	4-5	1	5	1-2	4-5	4	4-5	4	4-5	4	5
Fastness to perspiration ISO 105-E04 (Acid)	Change of Shade			3	5		4-5		4-5		5		5		5		5		4-5	4-5		4-5		3-4		3		5		4-5	4-5		5		5		5			
	Staining on Cotton			4	4-5		5		3-4		4		5		5		5		5		5		5		5		5		5		4-5	5		5		5		4-5		
	Staining on Nylon			4-5		4-5		5		4-5		4		5		5		5		5		5		5		5		5		4-5		5		5		5		5		
Fastness to rubbing ISO 105-X12	Dry		4-5	5	5	5	4-5	4-5	4	4	4-5	4-5	4-5	4-5	4-5	4-5	4	4	4-5	4-5	4-5	4-5	5	5	4	4-5	5	5	4	4-5	4-5	4-5	5	5	4	4-5	4-5	4-5		
	Wet		3	3-4	4	4	3-4	3-4	2	2-3	2-3	2-3	3	3-4	3	3-4	2-3	3	1-2	2	2	2-3	2	2-3	2-3	3	2	3	2	3	2-3	3	3	3-4	2-3	3		2		
Staining on Multi-Fiber (0.5% o.w.f.)	Acetate		4-5		4-5		4-5		3-4		4-5		4-5		4-5		4-5		4-5		4-5		4-5		4-5		3		4-5		4-5		5		3		3			
	Acrylic		4-5		4-5		4		4-5		4		4-5		4-5		4-5		4-5		4-5		3		3		3		4		4		5		5		1-2			
	Nylon		1		2		1		2		2		2		2		2-3		2		2		2-3		2		2		1-2		2		1-2		3		1			
	Silk		2-3		4-5		2-3		2		2		2		2		1-2		1-2		1-2		1-2		2		1		2		1-2		2-3		1-2		1-2			
	Rayon		1		1		1		1		1		1		1		1		1		1		1		1		1		1		1		1		1		1			
	Wool		3		4		2-3		2		2		1-2		2		2		1-2		1-2		2		2		3		2		1-2		3		2		2			
Polyester		4-5		4-5		4-5		4-5		2-3		4-5		4-5		4-5		4-5		4-5		4-5		4-5		4-5		4-5		4-5		4-5		3-4		3-4				

* Remark : Blue BRL is banned amine



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Company Profile

Modern Dyestuffs & Pigments Co., Ltd. (MDP) was founded in Thailand in 1990 by some dyestuff professionals with the aim to become one of the world's leading companies in the field of producing top quality colorant chemicals. At present MDP sells products through agents or directly into more than 70 countries worldwide.

MDP founded a long term strategic alliance on production and sales with one of the leading companies worldwide for leather dyestuffs and chemicals. With this MDP obtained access to a variety of new markets. MDP is now a well-known manufacturer and exporter of dyestuffs for leather, textiles, paper and other industries that need dyestuffs.

To meet international standards of product quality and product development and to improve its performance continuously on a daily basis, MDP employs advanced technology and established technical co-operations with leading colorant manufacturers around the world.

MDP has set up a professional R&D team as an important precondition to maintain its strength in the markets.

Furthermore MDP periodically upgrades and modernizes its sophisticated manufacturing equipment in order to keep up the high quality level of its products.

Note :

The information submitted in this publication is based on our current knowledge and experience. In view of the many factors that may affect processing and application, these data do not relieve processors of the responsibility of carrying out their own tests and experiments; neither do they imply and legally binding assurance of certain properties or of suitability for a specific purpose. It is the responsibility of those to whom we supply our products to ensure that any proprietary rights and existing laws and legislation are observed.



Dyeing Method :

Explanation of data sheet

S.D.C Classification

- A = Self - levelling dyestuffs good migration and levelling power
- B = Salt - controllable dyestuffs levelling is controlled by the carefully regulated addition of salt
- C = Temperature - controllable dyestuffs levelling and absorption are controlled

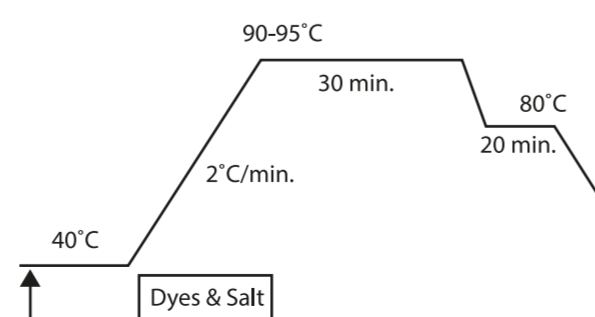
Suitability for High-Temp. dyeing

- A = 80% above exhaustion rate
- B = 65 - 70%
- C = Less than 64%

by means of regulated temperature increase and addition of salt.

Dyeing procedure :

Exhaust Process for Cellulose



1. Method I

This method is commonly employed for the almost all of Moderdirect dyestuffs.

- Pale shade = 2 - 10 g/l Na₂SO₄
- Medium-deep shade = 10 - 20 g/l Na₂SO₄

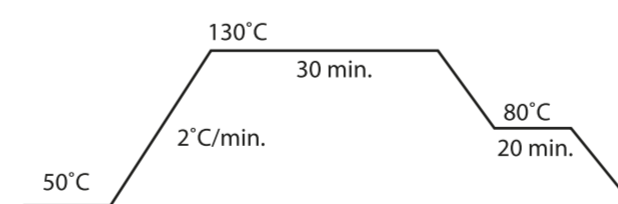
2. Method II

Moderdirect Black VSF/Black V FR is carried out to dye by the following alkali method :

- Pale shade = 2 - 10 g/l Na₂SO₄
1 - 2 g/l Na₂CO₃
- Medium- deep shade = 10 - 20 g/l Na₂SO₄
1 - 2 g/l Na₂CO₃

3. Method III

One - bath, one - step method for PES/Cell blended .



Dye, salt and acetic acid (pH = 5)

- Squestering = 0.5 - 2 g/l
- pH Buffer (pH = 5.0 - 5.5) = 2 - 3 g/l (HAc+NaAc)
- Pale Shade = 0 - 5 g/l Na₂SO₄
- Medium Shade = 10 - 15 g/l Na₂SO₄
- Deep Shade = 15 - 20 g/l Na₂SO₄

4. After Treatment

Direct dyes have hydrophilic groups and these are water soluble and dissociate in dye anions.

The cathionic fixing agent acts on dyes anionics and blocks the hydrophilic group of dyes on cellulosic materials, as the result wet fastness is improved.

5. Fixing Agents

- Polyamine type
- Dicyandiamide type
- Polycationic type
- Copper sulphate comp.
- Moderdirect dyes are fixed with above fixing agents.
- Fixing agent : 3 - 4 g/l at 60°C for 20 min.

under liquor ratio = 1 : 20

ModerDirect Supra[®]
 Excellent Dyeing for Cellulosic Fibres

