

BEMACID | BEMAPLEX

Acid and metal complex dyes for wool and polyamide

UNIQUE IDEAS. UNIQUE SOLUTIONS.



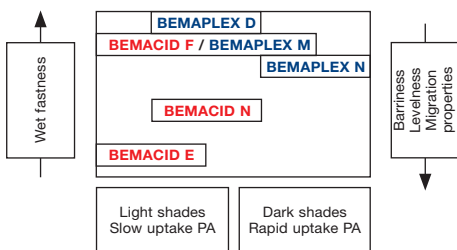
BEMACID | BEMAPLEX



> CLASSIFICATION OF THE ASSORTMENTS

BEMACID dyes have been classified in E, N or F groups, according to their dyeing and fastness properties. Group E dyes are distinguished by their high level of light fastness, good migration properties, good masking of barness due to kinetic differences within the substrate, good combinability, rapid exhaustion even at low temperatures and rapid fixing under saturated steam conditions. Their wet fastness is only moderate. Group N comprises acid dyes with high exhaust properties in a neutral medium, good combinability, high build-up properties, good level of wet fastness, good masking of barness due to kinetic differences within the substrate and rapid fixing under saturated steam conditions. Group F dyes have a high level of wet fastness, a high degree of brilliance and are hence perfectly suited to dye dark brilliant shades. Thanks to their good solubility and their high level of brilliance, they are ideal printing dyes. However, their combinability is limited. It is not recommended to use them to dye a 3-colour combination.

BEMAPLEX dyes are classified on the basis of the number of their sulfo groups. N (without sulfo group), M (with one sulfo group) and D (with two sulfo groups). When the number of sulfo groups increases, the wet fastness of a dye molecules increases too, the build-up properties decrease, the bath exhaustion is more heavily dependent the pH and the effect of anionic auxiliaries is stronger.



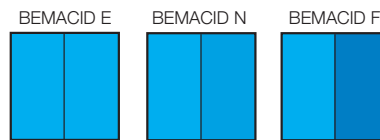
> DYEING PROPERTIES OF BEMACID DYES

Migration of the BEMACID groups

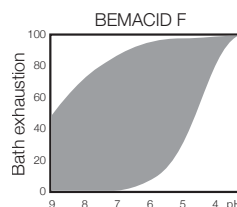
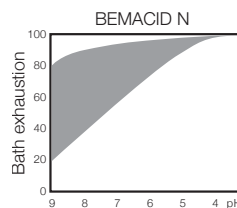
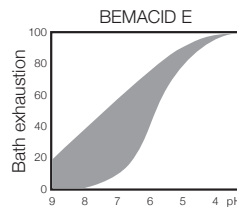
	BEMACID E	BEMACID N	BEMACID F
A	Light blue	Light blue	Light blue
B	Light blue	Light blue	Light blue
C	Light blue	Light blue	Light blue

A = original dyed fabric
 B = original dyed fabric after migration test
 C = adjacent fabric after migration test

Coverage of streakiness



pH-dependent bath exhaustion in 2/1 standard depth



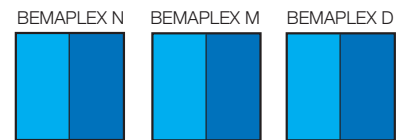
> DYEING PROPERTIES OF BEMAPLEX DYES

Migration of the BEMAPLEX groups

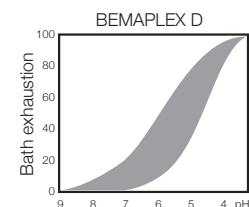
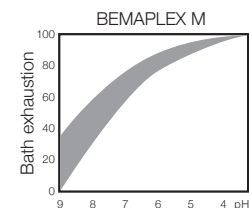
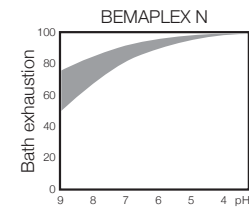
	BEMAPLEX N	BEMAPLEX M	BEMAPLEX D
A	Light blue	Light blue	Light blue
B	Light blue	Light blue	Light blue
C	Light blue	Light blue	Light blue

A = original dyed fabric
 B = original dyed fabric after migration test
 C = adjacent fabric after migration test

Coverage of streakiness



pH-dependent bath exhaustion in 2/1 standard depth

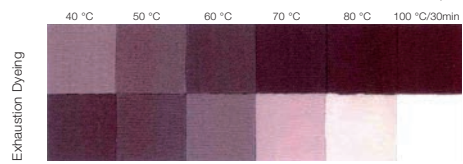


TERNARY COMPONENTS

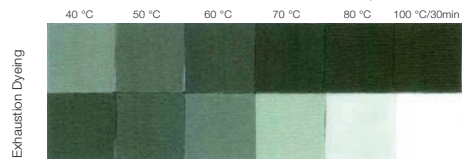


> COMBINABILITY BEMACID E-TL TERNARY

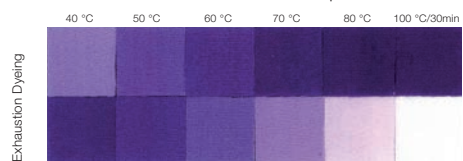
Yellow E-TL 01 / Red E-TL / Blue E-TL each 1/3 standard depth



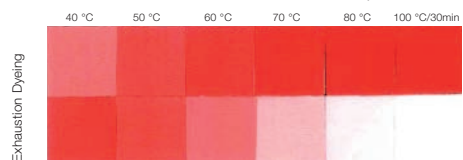
Yellow E-TL 01 / Blue E-TL each 1/2 standard depth



Red E-TL / Blue E-TL each 1/2 standard depth

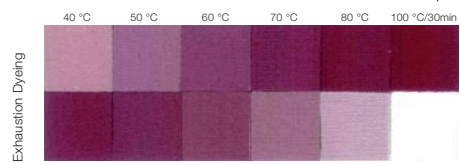


Yellow E-TL 01 / Red E-TL each 1/2 standard depth

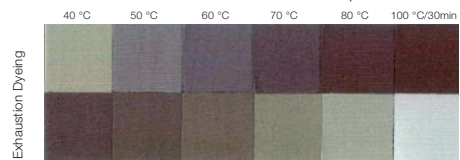


> COMBINABILITY BEMACID N-TF TERNARY

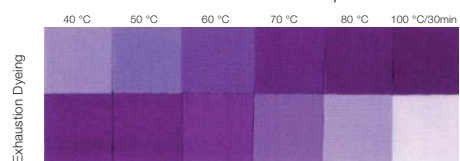
Yellow N-TF / Red N-TF / Blue N-TF each 1/3 standard depth



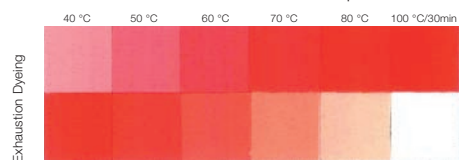
Yellow N-TF / Blue N-TF each 1/2 standard depth



Red N-TF / Blue N-TF each 1/2 standard depth

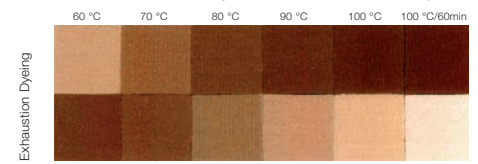


Yellow N-TF / Red N-TF each 1/2 standard depth

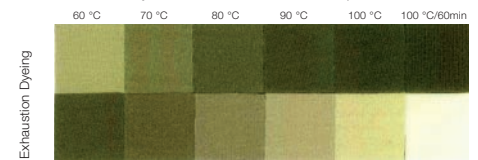


> COMBINABILITY BEMAPLEX M-T TERNARY

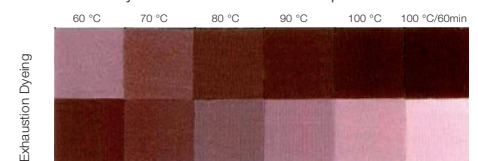
Yellow M-T / Red M-T / Navy M-T each 1/3 standard depth



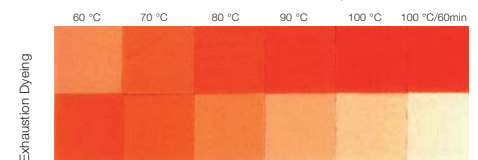
Yellow M-T / Navy M-T each 1/2 standard depth



Red M-T / Navy M-T each 1/2 standard depth



Yellow M-T / Red M-T each 1/2 standard depth



The more two dyes are similar in terms of kinetics and affinity, the more their bath exhaustion will be shade-in-shade. Shade-in-shade bath exhaustion is a significant advantage whenever a PA dyeing with acid dyes is to be reproduced safely. Whenever possible, recipes should prescribe the recommended components of the 3-colour combination. This ensures the best possible operational safety.

BEMACID Yellow E-TL 01, BEMACID Red E-TL and BEMACID Blue E-TL are the components of the BEMACID E ternary. Its application fields are carpet dyeing, dyeing of home textile products and of light shades in the field of clothing.

BEMACID Yellow N-TF, BEMACID Red N-TF and BEMACID Blue N-TF are the ternary components of this range. They are the "workhorses" in terms of dyeing of PA clothing, sportswear and technical textiles.

In the case of PA microfibrils or very rapid-uptake PA qualities, it may be necessary to use dyes with even better fastness properties to meet the requirements of the market.

In this case, the BEMAPLEX M-T ternary with BEMAPLEX Yellow M-T, Red M-T and Navy M-T as components, is the best choice. Not only is the combinability perfect, but the fastness level is high and the build up on normal polyamide is good, up to 6x standard depth.

DYEING OF POLYAMIDE AND WOOL



> CHT | BEZEMA GROUP – TECHNICAL COMPETENCY ALL ALONG THE TEXTILE CHAIN

Present on all major markets worldwide, CHT | BEZEMA Group has become one of the leading producers in this field. Nowadays, CHT | BEZEMA Group has representatives and agencies and is doing business in over 50 countries.

CHT | BEZEMA Group manufactures products for the entire textile chain, for fiber manufacturing, sizing, pretreatment, dyeing, printing, finishing, coating and textile care.

- Partner of the textile industry for 50 years
- Technical competency all along the textile chain
- Headquarters in Tübingen, Germany
- 20 companies manufacturing their own auxiliaries
- In-house research and development
- www.cht.com

> BEZEMA AG – COMPETENCY IN DEVELOPING AND MANUFACTURING DYES

BEZEMA AG, with headquarters in Montlingen/Switzerland, is an enterprise of the CHT | BEZEMA Group which is present worldwide. Our customers, specialists in textile finishing, value our high quality products.

This high quality standard is maintained thanks to the efficacy of our procedures, our modern production ranges and a multilevel verification and monitoring system. We assist our partners by sharing our know-how when new products are developed or when cost saving or ecological procedures are to be introduced.

- Competence center "Dyestuffs" within the CHT | BEZEMA Group
- Manufacturing of dyes and auxiliaries
- Founded in 1971
- Headquarters in Montlingen, Switzerland
- www.bezema.com

> SERVICE FLEXIBILITY, EFFICACY, CLOSENESS TO CUSTOMERS

Innovative research and development as well as cooperation with marketing, sales and technical application sectors of activity, ensure that our products are perfectly adapted to the market. Our efficient lab service and our technical application service and our closeness to the customer guarantee an optimal use of our dyes and textile auxiliaries for polyamide and wool. We value highly the training we provide in our modern training center to convey to our customers the knowledge required to help them solve daily problems in their enterprise. Our quality control unit and our ecological analytics lab provide the data ensuring a moderate impact of our products on the environment. Our highly flexible logistics department allows a fast and safe dispatching of our products to the destinations where they are needed.

GREATER FREEDOM

The acid and metal complex dye product range of the CHT | BEZEMA Group

BEMACID E

ADVANCED

Yellow E-TL 01
Red E-TL
Blue E-TL

BASIC

Luminous Yellow E-B
Yellow E-4G
Yellow E-T3R
Yellow E-5R
Luminous Red E-B
Red E-KRL
Red E-T2B
Red E-3BS
Blue E-2R
Blue E-T4R
Blue E-G
Blue E-3GC

BEMACID N

ADVANCED

Yellow N-TF
Red N-TF
Blue N-TF

BASIC

Yellow N-2G
Orange N-BG
Rubine N-5B
Bordeaux N-BL
Blue N-5GL
Navy N-5R
Black N-TMF

BEMACID F

BASIC

Yellow F-G
Yellow F-RN
Orange F-GR
Scarlet F-3G
Red F-GS
Red F-B
Red F-4B
Red F-LE
Violet F-B
Blue F-2R
Blue F-2G
Blue F-BL
Turquoise F-G
Green F-VS
Green F-2B
Black F-WL

BEMAPLEX N

BASIC

Yellow N-RN
Yellow N-BR
Yellow N-2RD
Bordeaux N-GT
Grey N-BL
Black N-RLD

BEMAPLEX M

ADVANCED

Yellow M-T
Red M-T
Navy M-T

BASIC

Black M-2B
Black M-LB

BEMAPLEX D

ADVANCED

Black D-HF

BASIC

Yellow D-4R
Orange D-R
Scarlet D-G
Rubine D-B
Blue D-8G
Navy D-RD
Green D-3B
Olive D-GL
Brown D-2R
Brown D-BD
Black D-R
Black D-TR



UNIQUE IDEAS. UNIQUE SOLUTIONS.

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