

The background of the entire page is a close-up photograph of numerous vertical threads of various colors, including red, yellow, green, orange, and purple. At the bottom of the image, there are several tassels made of these threads, some with decorative gold-colored beads or rings.

# RECOMMENDATION LIST H&M

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UNIQUE IDEAS. UNIQUE SOLUTIONS.



## **1. INTRODUCTION**

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## **2. PRETREATMENT**

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- 2.1 Enzymes
- 2.2 Scouring auxiliaries
- 2.3 Mercerising and causticising agent
- 2.4 Sequestrants
- 2.5 Wetting agents
- 2.6 Washing agents
- 2.7 Stabilizers
- 2.8 Optical brighteners
- 2.9 pH-buffers
- 2.10 Antifoams and deaerating agents
- 2.11 Other auxiliaries

## **3. DYEING AUXILIARIES**

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- 3.1 Levelling agents for CEL
- 3.2 Levelling agents & dyeing accelerators for synthetic fibres
- 3.3 Crease prevention agents
- 3.4 pH-regulators and buffers
- 3.5 Aftersoaping agents
- 3.6 Enzymes
- 3.7 Fastness improvement
- 3.8 Aftertreatment and reserving agents for PA
- 3.9 Auxiliaries for padding and continuous dyeing
- 3.10 Oxidizing and reducing agents
- 3.11 Peroxide destructors
- 3.12 Sequestrants and dispersing agents
- 3.13 Other dyeing auxiliaries
- 3.14 Cleaning agents for machines

#### **4. REACTIVE DYES FOR DYEING AND PRINTING OF CELLULOSIC FIBRES**

- 4.1 BEZAKTIV S-LF
- 4.2 BEZAKTIV S-MAX and  
BEZAKTIV S-MATRIX 150
- 4.3 BEZAKTIV COSMOS S-C
- 4.4 BEZAKTIV GO
- 4.5 BEZAKTIV HP
- 4.6 BEZAKTIV V
- 4.7 BEZAKTIV S
- 4.8 BEZAKTIV HE-MATRIX
- 4.9 BEZAKTIV HE
- 4.10 BEZAKTIV GF
- 4.11 BEZAKTIV P

#### **5. VAT DYES FOR DYEING OF CELLULOSE FIBRES**

- 5.1 BEZATHREN

#### **6. DISPERSE DYES**

##### **6.1 DISPERSE DYES FOR PES FIBRES**

- 6.1.1 BEMACRON HP-LTD /  
BEMACRON HP
- 6.1.2 BEMACRON SEL
- 6.1.3 BEMACRON RS / BEMACRON S /  
BEMACRON SE
- 6.1.4 BEMACRON E
- 6.1.5 BEMACRON P

##### **6.2 DISPERSE DYES FOR ACETAT FIBRES**

- 6.2.1 BEMACRON CA

#### **7. 1:2 METAL COMPLEX DYES FOR DYEING OF PA FIBRES**

- 7.1 BEMAPLEX M-T / BEMAPLEX M
- 7.2 BEMAPLEX N
- 7.3 BEMAPLEX D
- 7.4 BEMAPLEX P

## **8. REACTIVE DYES FOR DYEING OF WOOL FIBRES**

8.1 BEZAKTIV WO

## **9. ACID DYES FOR WOOL AND PA FIBRES**

- 9.1 BEMACID E-TL / BEMACID E
- 9.2 BEMACID N-TF / BEMACID N
- 9.3 BEMACID F
- 9.4 BEMACID P

## **10. DIRECT DYES FOR DYEING OF CELLULOSIC FIBRES**

10.1 TUBANTIN

## **11. CATIONIC DYES FOR DYEING OF PAN FIBRES**

11.1 BEZACRYL

## **12. FINISHING AUXILIARIES**

- 12.1 Softeners
- 12.2 Silicone softeners
- 12.3 Silicone compound softeners
- 12.4 Softener concentrates
- 12.5 Easy care finishing agents and catalysts
- 12.6 Handle modifier
- 12.7 Sewing thread lubricants
- 12.8 Yam lubricants
- 12.9 Antistatic agents
- 12.10 Antifoams
- 12.11 Other finishing agents

### **13. FIBRE ADDITIVES**

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- 13.1 Spinning lubricants for polyester
- 13.2 Spinning lubricants for polyolefine filaments
- 13.3 Spinning lubricants for polyolefine staple fibres
- 13.4 Spinning lubricants for polyamide
- 13.5 Lubricants for yarn production
- 13.6 Coning oils
- 13.7 Spinning lubricants for polyolefine tape
- 13.8 Spinning lubricants for polyolefine spunbond
- 13.9 Other fibre additives

### **14. COATING**

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- 14.1 Dispersions / binders
- 14.2 Thickening agents
- 14.3 Antifoams
- 14.4 Crosslinking and fixing agents
- 14.5 Compounds for paste coating
- 14.6 Compounds for foam coating
- 14.7 Films / membranes / laminating
- 14.8 Water / oil repellence
- 14.9 Other coating auxiliaries

### **15. TEXTILE PRINTING**

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- 15.1 Disperse thickener
- 15.2 Reactive thickener
- 15.3 Universal thickener
- 15.4 Carpet thickener
- 15.5 Carpet auxiliaries
- 15.6 Oxidizing / reducing agents
- 15.7 Printing auxiliaries
- 15.8 Blanket adhesives
- 15.9 Printing washing-off
- 15.10 Pigment thickeners
- 15.11 Binders
- 15.12 Fixing agents

## **15. TEXTILE PRINTING**

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- 15.13** Softeners
- 15.14** Pigment rheological additives
- 15.15** White and lac pastes
- 15.16** Pigment gloss pastes
- 15.17** Foil adhesives
- 15.18** Pigment discharge pastes
- 15.19** Special printing process auxiliaries
- 15.20** Antifoams and deaerating agents
- 15.21** Running improver
- 15.22** Pigment dyeing
- 15.23** Screen printing ink
- 15.24** Silicone compound for coating

## **16. PIGMENT PRODUCTS FOR PRINTING**

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- 16.1** BEZAPRINT GOT / BEZAPRINT
- 16.2** BEZAFLUOR
- 16.3** COLORMATCH

## **17. FLOCK FOR TEXTILE CLOTHING**

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- 17.1** Flock additives
- 17.2** Flock adhesives
- 17.3** Flock transfer auxiliaries

## **18. SIZING ADHESIVES**

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## **19. GARMENT AUXILIARIES**

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- 19.1** Amylases
- 19.2** Cellulases
- 19.3** Laccases
- 19.4** Antibackstaining washing & dispersing agents
- 19.5** Softeners
- 19.6** Resin finishing agents
- 19.7** Auxiliaries for special effects
- 19.8** Garment dye
- 19.9** Other garment auxiliaries



## INTRODUCTION

In the Zero Discharge of Hazardous Chemicals (ZDHC) Joint Roadmap, Version 2, ZDHC member brands are committed to define and develop a Manufacturing Restricted Substances List (MRSL) for the apparel and footwear industry. The ZDHC MRSL addresses hazardous substances potentially used and discharged into the environment during manufacturing and related processes, not just those substances that could be present in finished products.

The ZDHC MRSL is a list of chemical substances subject to a usage ban, meaning that the MRSL-listed chemical substance or group of substances may not be used to achieve a desired function or effect during production of the raw material or product (that is, no intentional use). Due to the existence of manufacturing impurities in chemical formulations, a minor or trace amount of the restricted substance is permitted within defined concentration limits. Chemical formulations containing restricted substances that exceed these limits are not compliant with the MRSL.

Additional to the restrictions defined by the ZDHC MRSL (version 1.1, December 2015), the CHT R. Beitlich GmbH and BEZEMA AG published this H&M recommendation list, containing products, which are also compliant with the H&M Chemical Restrictions for Apparel/Accessories/Footwear/Home Interior Textile Products and with the H&M Manufacturing Restricted Substances List.

Please be advised that based on the information available to us from our raw material suppliers the current products offered in the product lines listed below do not exceed the limits of the H&M Chemical Restrictions for Apparel/Accessories/Footwear/Home Interior Textile Products and with the H&M Manufacturing Restricted Substances List. To the best of our knowledge, none of these substances are intentionally generated during production.

This list currently does not cover the complete portfolio of the CHT/BEZEMA Group worldwide but will be updated permanently or whenever the demands are changing or the product range is being expanded.

This confirmation is only valid for the H&M Chemical Restrictions for Apparel/Accessories/Footwear/Home Interior Textile Products (Version January 2017) and with the H&M Manufacturing Restricted Substances List (Version 2.0, May 2016).

If you have any questions concerning the application and further technical details, please contact

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## DISCLAIMER:

This document is in addition to, but not replacing, the information on the Material Safety Data Sheet (MSDS) and the Technical Leaflet (TL). Please read the MSDS and the TL of the product in order to comply with legal requirements and the H&M Chemical Restrictions. The TL informs about the CHT / BEZEMA recommendations for proper application.

Any user of our products is responsible for determining the suitability of CHT / BEZEMA products for its particular application.

## PRETREATMENT

### 2.1 ENZYMES

BEISOL AFG  
BEISOL PRO

BEISOL HTS  
BEISOL SED

BEISOL LZV  
BEISOL T 2090

### 2.2 SOURCING AUXILIARIES

SUBITOL AS 6

SUBITOL ASN

### 2.3 MERCERISING AND CAUSTICISING AGENT

SUBITOL MLF

### 2.4 SEQUESTRANTS

BEIXON NE  
HEPTOL ESW <sup>1</sup>

HEPTOL B 81 200%  
HEPTOL KEB

HEPTOL EMG <sup>1</sup>  
HEPTOL NWS

### 2.5 WETTING AGENTS

SUBITOL LS-N  
SUBITOL SB

SUBITOL RNC

SUBITOL SAN

### 2.6 WASHING AGENTS

FELOSAN ELA  
FELOSAN IFA  
FELOSAN NKB  
FELOSAN RG-N  
LAVOTAN SE

FELOSAN FDO NEU  
FELOSAN JET  
FELOSAN NOF  
FELOSAN RIZ  
LAVOTAN TBU

FELOSAN FOX  
FELOSAN NFG  
FELOSAN RNF  
LAVOTAN DSU

### 2.7 STABILIZERS

CONTAVAN BRT  
CONTAVAN ICE  
CONTAVAN VAN

CONTAVAN DSA  
CONTAVAN TIG  
HEPTOL B 95

CONTAVAN GAL  
CONTAVAN TIM  
VISCAVIN GFN

<sup>1</sup> Fabrics finished only with this product show a formaldehyde value of < 16 ppm, if proper production parameters are kept.



## PRETREATMENT

### 2.8 OPTICAL BRIGHTENERS

TUBOBLANC 2 B CONC	TUBOBLANC COL	TUBOBLANC CRL
TUBOBLANC CRL-S3	TUBOBLANC DIK	TUBOBLANC EBF
TUBOBLANC ERN	TUBOBLANC HA	TUBOBLANC HA-D3 <sup>2</sup>
TUBOBLANC HA-PD	TUBOBLANC HA-S4 <sup>2</sup>	TUBOBLANC HV
TUBOBLANC MA	TUBOBLANC PE-R	TUBOBLANC PT-B
TUBOBLANC PT-O	TUBOBLANC RBV	TUBOBLANC RUB

### 2.9 pH-BUFFERS

CHT-PUFFER FBA	NEUTRACID NCS	NEUTRACID NVM 200
NEUTRACID PAT	NEUTRACID WSG	

### 2.10 ANTIFOAMS AND DEAERATING AGENTS

KOLLASOL AD	KOLLASOL CDA	KOLLASOL CDO
KOLLASOL CDS	KOLLASOL HV	KOLLASOL IND
KOLLASOL K22	KOLLASOL LOK	KOLLASOL OCE
KOLLASOL SD		

### 2.11 OTHER AUXILIARIES

CHT-AKTIVATOR FBA	FLUOREX DEL	TUBOSET DAP
TUBOSET LVI	TUBOSET PAP	TUBOSET SAM
TUBOSET SML	TUBOTEX NCD	TUBOTEX OW

<sup>2</sup> The product contains a small amount of aniline as an impurity in its recipe. According to our estimation a limit value of < 10 ppm can be obtained with regard to the applied quantity under suitable production conditions. Therefore the limit value according to the H&M restrictions can be kept.

## DYEING AUXILIARIES

### 3.1 LEVELLING AGENTS FOR CEL

RETINOL M  
SARABID SBF-N

SARABID LDR<sup>3</sup>  
SARABID VAT<sup>3</sup>

SARABID MIP<sup>3</sup>  
SARABID C 12<sup>3</sup>

### 3.2 LEVELLING AGENTS & DYEING ACCELERATORS FOR SYNTHETIC FIBRES

ACRYPAL OE  
EGASOL MD  
SARABID IPM  
SARABID C 12<sup>3</sup>

CHT-DISPERGATOR XHT  
SARABID IPD  
SARABID TS 300  
SARABID C 14<sup>3</sup>

CHT-DISPERGATOR XHT-S  
SARABID IPF  
TUBACRYL RI

### 3.3 CREASE PREVENTION AGENTS

BIAVIN 109  
BIAVIN PCV

BIAVIN BPA  
BIAVIN TCC

BIAVIN DFG  
VISCAVIN S 700

### 3.4 pH-REGULATORS AND BUFFERS

BEICONTROL RD  
MEROPAN KP  
Si-CONTROL KKV

MEROPAN CIT<sup>3</sup>  
MEROPAN LS

MEROPAN EF 200  
NEUTRACID BO 45

### 3.5 AFTERSOAPING AGENTS

COTOBLANC KRS  
COTOBLANC RS

COTOBLANC NSR  
COTOBLANC SEL

COTOBLANC PCS  
COTOBLANC SEL 200

### 3.6 ENZYMES

BEIZYM ACE  
BEIZYM HC

BEIZYM BPN  
BEIZYM UL

BEIZYM BPN 300

### 3.7 FASTNESS IMPROVEMENT

REWIN ACP  
REWIN FSN  
REWIN OS

REWIN DD  
REWIN IN 35  
REWIN DWR

REWIN DMT  
REWIN MRT

<sup>3</sup> Fabrics finished only with this product show a formaldehyde value of < 16 ppm, if proper production parameters are kept.

## DYEING AUXILIARIES

### 3.8 AFTERTREATMENT AND RESERVING AGENTS FOR PA

REWIN KBL  
REWIN KNR <sup>4</sup>

REWIN KF <sup>4</sup>

REWIN KMB <sup>4</sup>

### 3.9 AUXILIARIES FOR PADDING AND CONTINUOUS DYEING

COLORCONTIN MCD

COLORCONTIN VGP

MIGRASOL SAP

### 3.10 OXIDIZING AND REDUCING AGENTS

MEROPAN RED <sup>4</sup>  
REDULIT F

MEROPAN XR GRANULAT  
REDULIT GIN

REDULIT EX  
REDULIT RED <sup>4</sup>

### 3.11 PEROXIDE DESTRUCTORS

CHT-CATALASE BF

MEROPAN BRE

### 3.12 SEQUESTRANTS AND DISPERSING AGENTS

BEIXON AB 200%  
CHT-DISPERGATOR SMS <sup>4</sup>  
MEROPAN DA  
SARABID 200 LL

BEIXON BCA  
HEPTOL ANO  
MEROPAN DA 200  
SARABID DLO CONC

CHT-DISPERGATOR ORM <sup>4</sup>  
HEPTOL SF4  
MEROPAN DPE

### 3.13 OTHER DYEING AUXILIARIES

ARRISTAN BINDER CA <sup>5</sup>

REWIN LAN

SILKOBLANC BN

### 3.14 CLEANING AGENT FOR MACHINES

INTENSOL MR

INTENSOL OLI

<sup>4</sup> Fabrics finished only with this product show a formaldehyde value of < 16 ppm, if proper production parameters are kept.

<sup>5</sup> Fabrics finished only with this product show a formaldehyde value of < 75 ppm, if proper production parameters are kept.

## REACTIVE DYES FOR DYEING AND PRINTING OF CELLULOSIC FIBRES

### 4.1 BEZAKTIV S-LF

BEZAKTIV Yellow S-LF<sup>6</sup>  
BEZAKTIV Blue S-LF<sup>6</sup>  
BEZAKTIV Navy S-LF<sup>6</sup>

BEZAKTIV Beige S-LF<sup>6</sup>  
BEZAKTIV Grey S-LF<sup>6</sup>

BEZAKTIV Red S-LF<sup>6</sup>  
BEZAKTIV Black S-LF<sup>6</sup>

### 4.2 BEZAKTIV S-MAX AND BEZAKTIV S-MATRIX 150

BEZAKTIV Yellow S-MAX  
BEZAKTIV Red S-MAX  
BEZAKTIV Blue S-MAX  
BEZAKTIV Black S-MAX

BEZAKTIV Yellow S-MATRIX 150  
BEZAKTIV Red S-MATRIX 150  
BEZAKTIV Blue S-MATRIX 150<sup>6</sup>  
BEZAKTIV Cosmos S-MAX

BEZAKTIV Orange S-MAX  
BEZAKTIV Rubine S-MAX-01  
BEZAKTIV Navy S-MAX

### 4.3 BEZAKTIV COSMOS S-C

BEZAKTIV Cosmos Yellow S-C  
BEZAKTIV Cosmos Orange S-C  
BEZAKTIV Cosmos Blue S-C

BEZAKTIV Cosmos Golden Yellow S-C  
BEZAKTIV Cosmos Red S-C  
BEZAKTIV Cosmos Navy S-C

### 4.4 BEZAKTIV GO

BEZAKTIV Golden Yellow GO  
BEZAKTIV Red GO  
BEZAKTIV Navy GO

BEZAKTIV Orange GO  
BEZAKTIV Blue GO<sup>6</sup>  
BEZAKTIV Black GO

BEZAKTIV Scarlet GO  
BEZAKTIV Dark Blue GO<sup>6</sup>

### 4.5 BEZAKTIV HP

BEZAKTIV Yellow HP-NP  
BEZAKTIV Blue HP-R<sup>6</sup>  
BEZAKTIV Grey HP-N<sup>6</sup>

BEZAKTIV Red HP-3B  
BEZAKTIV Brown HP-5R

BEZAKTIV Red HP-BL  
BEZAKTIV Olive HP-B<sup>6</sup>

### 4.6 BEZAKTIV V

BEZAKTIV Yellow V-5GL  
BEZAKTIV Yellow V-GR 133  
BEZAKTIV Yellow V-3B<sup>6</sup>  
BEZAKTIV Red V-BT 200  
BEZAKTIV Red V-F3B  
BEZAKTIV Violet V-5R<sup>6</sup>  
BEZAKTIV Blue V-RN 150  
BEZAKTIV Green V-6B<sup>7</sup>  
BEZAKTIV Navy V-2G 133  
BEZAKTIV Black V-BD 133  
BEZAKTIV Black V-RSD 75 liq.

BEZAKTIV Yellow V-GL 150  
BEZAKTIV Yellow V-R  
BEZAKTIV Red V-GG  
BEZAKTIV Red V-RB 133  
BEZAKTIV Red V-3B<sup>6</sup>  
BEZAKTIV Blue V-R spec.  
BEZAKTIV Blue V-2B 133<sup>6</sup>  
BEZAKTIV Brown V-GR<sup>6</sup>  
BEZAKTIV Black V-RL 150<sup>6</sup>  
BEZAKTIV Black V-GRA

BEZAKTIV Yellow V-FGA  
BEZAKTIV Yellow V-2R 150  
BEZAKTIV Red V-BB 150  
BEZAKTIV Red V-5B  
BEZAKTIV Bordeaux V-B<sup>6</sup>  
BEZAKTIV Blue V-RN spec.  
BEZAKTIV Turquoise V-G conc.<sup>6</sup>  
BEZAKTIV Dark Blue V-HR<sup>6</sup>  
BEZAKTIV Black V-B 150  
BEZAKTIV Black V-CMR

<sup>6</sup> contains Cu, for baby wear the content of Cu in the extract should be controlled

<sup>7</sup> contains Ni, content of Ni in the extract should be controlled

#### 4.7 BEZAKTIV S

BEZAKTIV Yellow S-8G	BEZAKTIV Yellow S-8GN	BEZAKTIV Yellow S-3R 150
BEZAKTIV Orange S-RL 150	BEZAKTIV Scarlet S-2GF 150	BEZAKTIV Red S-GT 150
BEZAKTIV Red S-2B	BEZAKTIV Red S-3B 150	BEZAKTIV Blue S-FR 150 <sup>8</sup>
BEZAKTIV Blue S-R <sup>8</sup>	BEZAKTIV Blue S-RN <sup>8</sup>	BEZAKTIV Blue S-GN 150
BEZAKTIV Blue S-GLD 150 <sup>8</sup>	BEZAKTIV Blue S-2G	BEZAKTIV Turquoise S-BF 150 <sup>8</sup>
BEZAKTIV Royal S-B	BEZAKTIV Navy S-3G 150	BEZAKTIV Navy S-2GL
BEZAKTIV Navy S-BL	BEZAKTIV Navy S-CR <sup>8</sup>	BEZAKTIV Navy S-G
BEZAKTIV Green S-4B 150	BEZAKTIV Brown S-5BR	BEZAKTIV Black S-GR
BEZAKTIV Black S-NN	BEZAKTIV Black S-NN liq.	BEZAKTIV Black S-TAR
BEZAKTIV Black S-WF		

#### 4.8 BEZAKTIV HE-MATRIX

BEZAKTIV Yellow HE-MATRIX	BEZAKTIV Red HE-MATRIX	BEZAKTIV Navy HE-MATRIX
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#### 4.9 BEZAKTIV HE

BEZAKTIV Yellow HE-6G	BEZAKTIV Yellow HE-4G	BEZAKTIV Yellow HE-4R
BEZAKTIV Orange HE-R	BEZAKTIV Scarlet HE-2G	BEZAKTIV Red HE-3B
BEZAKTIV Red HE-7B	BEZAKTIV Turquoise HE-A <sup>8</sup>	BEZAKTIV Blue HE-RM 133 <sup>8</sup>
BEZAKTIV Blue HE-GX 145	BEZAKTIV Navy HE-R 120	

#### 4.10 BEZAKTIV GF

BEZAKTIV Yellow GF-6G	BEZAKTIV Yellow GF-RR	BEZAKTIV Beige GF-2G <sup>8</sup>
BEZAKTIV Orange GF-2G	BEZAKTIV Red GF-4B	BEZAKTIV Red GF-BR
BEZAKTIV Violet GF-3R <sup>8</sup>	BEZAKTIV Blue GF-GG	BEZAKTIV Blue GF-N
BEZAKTIV Blue GF-RD <sup>8</sup>	BEZAKTIV Turquoise GF-2G <sup>8</sup>	BEZAKTIV Green GF-4B <sup>9</sup>
BEZAKTIV Brown GF-R <sup>8</sup>	BEZAKTIV Grey GF-N <sup>8</sup>	

#### 4.11 BEZAKTIV P

BEZAKTIV Yellow P-6G	BEZAKTIV Yellow P-5G	BEZAKTIV Yellow P-4GD 125
BEZAKTIV Yellow P-A	BEZAKTIV Golden Yellow P-R	BEZAKTIV Orange P-2R
BEZAKTIV Orange P-4R	BEZAKTIV Orange P-XR	BEZAKTIV Scarlet P-R
BEZAKTIV Red P-B	BEZAKTIV Red P-8BN	BEZAKTIV Violet P-3R <sup>8</sup>
BEZAKTIV Turquoise P-A <sup>8</sup>	BEZAKTIV Blue P-BR	BEZAKTIV Blue P-3R
BEZAKTIV Blue P-XR	BEZAKTIV Navy P-5R <sup>8</sup>	BEZAKTIV Navy P-2R
BEZAKTIV Black P-R		

<sup>8</sup> contains Cu, for baby wear the content of Cu in the extract should be controlled

<sup>9</sup> contains Ni, content of Ni in the extract should be controlled

## 5.1 BEZATHREN

BEZATHREN Yellow 5GF	BEZATHREN Yellow GC	BEZATHREN Yellow F3GC
BEZATHREN Yellow 3RT	BEZATHREN Golden Yellow RK	BEZATHREN Golden Orange 3G
BEZATHREN Golden Orange G	BEZATHREN Orange RRTS	BEZATHREN Orange GR
BEZATHREN Red LGG	BEZATHREN Red LGN	BEZATHREN Scarlet GG
BEZATHREN Scarlet EFR	BEZATHREN Red FBB	BEZATHREN Red F3B
BEZATHREN Bordeaux RR	BEZATHREN Rubine R	BEZATHREN Violet 3B
BEZATHREN Violet B	BEZATHREN Blue RCL	BEZATHREN Blue RS
BEZATHREN Blue BC	BEZATHREN Blue CLF	BEZATHREN Dark Blue BOA
BEZATHREN Dark Blue DB	BEZATHREN Navy GN	BEZATHREN Green CF
BEZATHREN Green FFB	BEZATHREN Olive Green B	BEZATHREN Olive Green MW
BEZATHREN Brown LBG	BEZATHREN Brown G	BEZATHREN Brown R
BEZATHREN Brown BR	BEZATHREN Brown HRR	BEZATHREN Olive R
BEZATHREN Olive T	BEZATHREN Grey RBN	BEZATHREN Grey CL
BEZATHREN Grey CB	BEZATHREN Grey MIR	BEZATHREN Grey NC
BEZATHREN Black RB	BEZATHREN Black R	BEZATHREN Black RI
BEZATHREN Black BB		



## DISPERSE DYES

### 6.1 DISPERSE DYES FOR PES FIBRES

#### 6.1.1 BEMACRON HP-LTD / BEMACRON HP

BEMACRON Yellow HP-LTD 01	BEMACRON Orange HP-LTD 01	BEMACRON Red HP-LTD 01
BEMACRON Rubine HP-LTD 01	BEMACRON Blue HP-LTD	BEMACRON Black HP-LTD
BEMACRON Citron HP-2G	BEMACRON Yellow HP-G	BEMACRON Yellow HP-2R
BEMACRON Orange HP-3B	BEMACRON Carmine HP-2G	BEMACRON Red HP-B
BEMACRON Red HP-BS	BEMACRON Red HP-2BL	BEMACRON Red HP-RT
BEMACRON Rubine HP-3B	BEMACRON Cyan HP-G	BEMACRON Blue HP-3R
BEMACRON Navy HP-RT	BEMACRON Black HP-RT	
BEMACRON Dark Blue HP-LTD 01		

#### 6.1.2 BEMACRON SEL

BEMACRON Luminous Yellow SEL-EN	BEMACRON Luminous Yellow SEL-8G
BEMACRON Luminous Orange SEL-EN	BEMACRON Luminous Red SEL-G
BEMACRON Luminous Red SEL-4B	

#### 6.1.3 BEMACRON RS / BEMACRON S / BEMACRON SE

BEMACRON Yellow RS	BEMACRON Red RS	BEMACRON Rubine RS
BEMACRON Blue RS	BEMACRON Navy RS	BEMACRON Black RS
BEMACRON Yellow S-6GF	BEMACRON Yellow S-4G	BEMACRON Orange S-G
BEMACRON Scarlet S-GFL	BEMACRON Scarlet S-BWFL	BEMACRON Rubine S-2GFL
BEMACRON Violet S-3RL	BEMACRON Violet S-BLF	BEMACRON Blue S-BGL
BEMACRON Blue S-BB	BEMACRON Turquoise S-GF	BEMACRON Navy S-2GL
BEMACRON Navy S-3L	BEMACRON Black S-3L	BEMACRON Black S-TL
BEMACRON Yellow SE-RDL	BEMACRON Yellow SE-LF	BEMACRON Red SE-4G
BEMACRON Pink SE-REL	BEMACRON Red SE-3B	BEMACRON Red SE-RDL
BEMACRON Blue SE-LF	BEMACRON Blue SE-RDL	BEMACRON Black SE-RD2R
BEMACRON Yellow Brown S-2RFL		

#### 6.1.4 BEMACRON E

BEMACRON Yellow E-3GL	BEMACRON Red E-FBL	BEMACRON Blue E-FBL
BEMACRON Black E-RD		

## DISPERSE DYES

### 6.1.5 BEMACRON P

BEMACRON Yellow P-6G	BEMACRON Black P-NL liq.	BEMACRON Black P-G
BEMACRON Yellow P-4G	BEMACRON Grey P-N	BEMACRON Navy P-2G
BEMACRON Orange P-G	BEMACRON Scarlet P-4R	BEMACRON Pink P-R
BEMACRON Red P-4G	BEMACRON Red P-3B	BEMACRON Scarlet P-3G
BEMACRON Rubine P-2G	BEMACRON Red P-BBL	BEMACRON Violet P-3R
BEMACRON Turquoise P-BG	BEMACRON Blue P-BG	BEMACRON Blue P-R
BEMACRON Blue P-BB	BEMACRON Luminous Yellow P-8G	
BEMACRON Luminous Red P-G	BEMACRON Golden Yellow P-6M	

## 6.2 DISPERSE DYES FOR ACETAT FIBRES

### 6.2.1 BEMACRON CA

BEMACRON Yellow CA	BEMACRON Orange CA	BEMACRON Red CA
BEMACRON Blue CA	BEMACRON Navy CA	BEMACRON Black CA 01

## 1:2 METAL COMPLEX DYES FOR WOOL AND PA FIBRES

### 7.1 BEMAPLEX M-T / BEMAPLEX M

BEMAPLEX Yellow M-T <sup>10</sup>  
BEMAPLEX Black M-2B <sup>11</sup>

BEMAPLEX Red M-T <sup>11</sup>  
BEMAPLEX Black M-LB <sup>11</sup>

BEMAPLEX Navy M-T <sup>11</sup>

### 7.2 BEMAPLEX N

BEMAPLEX Yellow N-RN <sup>11</sup>  
BEMAPLEX Red N-RBD <sup>11</sup>  
BEMAPLEX Black N-RLD <sup>11</sup>

BEMAPLEX Yellow N-BR <sup>12</sup>  
BEMAPLEX Bordeaux N-GT <sup>12</sup>

BEMAPLEX Yellow N-2RD <sup>12</sup>  
BEMAPLEX Grey N-BL <sup>11</sup>

### 7.3 BEMAPLEX D

BEMAPLEX Yellow D-4R <sup>12</sup>  
BEMAPLEX Red D-RL <sup>11</sup>  
BEMAPLEX Navy D-RD <sup>11</sup>  
BEMAPLEX Brown D-2R <sup>11</sup>  
BEMAPLEX Black D-R <sup>11</sup>

BEMAPLEX Orange D-R <sup>11</sup>  
BEMAPLEX Rubine D-B <sup>11</sup>  
BEMAPLEX Green D-3B <sup>11</sup>  
BEMAPLEX Brown D-BD <sup>11</sup>  
BEMAPLEX Black D-TR <sup>11</sup>

BEMAPLEX Scarlet D-G <sup>11</sup>  
BEMAPLEX Blue D-8G <sup>13</sup>  
BEMAPLEX Olive D-GL <sup>11</sup>  
BEMAPLEX Black D-HF <sup>11</sup>

### 7.4 BEMAPLEX P

BEMAPLEX Navy P-DRD <sup>11</sup>

BEMAPLEX Brown P-DBD <sup>11</sup>

BEMAPLEX P-DTR <sup>11</sup>

<sup>10</sup> contains Cr/Co, the content of Cr/Co in the extract should be controlled

<sup>11</sup> contains Cr, the content of Cr in the extract should be controlled

<sup>12</sup> contains Co, the content of Co in the extract should be controlled

<sup>13</sup> contains Cu, for baby wear the content of Cu in the extract should be controlled

## REACTIVE DYES FOR WOOL FIBRES

### 8.1 BEZAKTIV WO

BEZAKTIV Yellow WO-4G  
BEZAKTIV Orange WO-R  
BEZAKTIV Red WO-B  
BEZAKTIV Blue WO-2R  
BEZAKTIV Navy WO-BT  
BEZAKTIV Black WO-X

BEZAKTIV Yellow WO-5G  
BEZAKTIV Scarlet WO-2G  
BEZAKTIV Red WO-BB  
BEZAKTIV Blue WO-DB  
BEZAKTIV Navy WO-X

BEZAKTIV Yellow WO-4R  
BEZAKTIV Red WO-RS  
BEZAKTIV Red WO-6G  
BEZAKTIV Blue WO-3G  
BEZAKTIV Black WO-RS

## ACID DYES FOR WOOL AND PA FIBRES

### 9.1 BEMACID E-TL / BEMACID E

BEMACID Red E-TL  
BEMACID Yellow E-4G  
BEMACID Luminous Red E-B  
BEMACID Red E-3BS  
BEMACID Blue E-3GC

BEMACID Blue E-TL  
BEMACID Yellow E-T3R  
BEMACID Red E-KRL  
BEMACID Blue E-T4R

BEMACID Luminous Yellow E-B  
BEMACID Yellow E-5R  
BEMACID Red E-T2B  
BEMACID Blue E-G

### 9.2 BEMACID N-TF / BEMACID N

BEMACID Yellow N-TF  
BEMACID Yellow N-2G  
BEMACID Bordeaux N-BL  
BEMACID Black N-TMF

BEMACID Red N-TF  
BEMACID Orange N-BG  
BEMACID Blue N-5GL

BEMACID Blue N-TF  
BEMACID Rubine N-5B  
BEMACID Navy N-5R

### 9.3 BEMACID F

BEMACID Yellow F-G  
BEMACID Scarlet F-3G  
BEMACID Red F-4B  
BEMACID Blue F-2R  
BEMACID Turquoise F-G <sup>14</sup>  
BEMACID Black F-WL <sup>15</sup>

BEMACID Yellow F-RN  
BEMACID Red F-GS  
BEMACID Red F-LE  
BEMACID Blue F-2G  
BEMACID Green F-2B

BEMACID Orange F-GR  
BEMACID Red F-B  
BEMACID Violet F-B  
BEMACID Blue F-BL  
BEMACID Green F-VS

<sup>14</sup> contains Cu, for baby wear the content of Cu in the extract should be controlled

<sup>15</sup> contains Cr, the content of Cr in the extract should be controlled

## ACID DYES FOR WOOL AND PA FIBRES

### 9.4 BEMACID P

BEMACID Yellow P-FG  
BEMACID Scarlet P-F3G  
BEMACID Red P-F4B  
BEMACID Blue P-F2G  
BEMACID Green P-F2B

BEMACID Yellow P-FRN  
BEMACID Red P-FGS  
BEMACID Violet P-FB  
BEMACID Turquoise P-FG <sup>16</sup>

BEMACID Orange P-FGR  
BEMACID Red P-FLE  
BEMACID Blue P-NTF  
BEMACID Blue P-N5GL

## DIRECT DYES FOR DYEING OF CELLULOSIC FIBRES

### 10.1 TUBANTIN

TUBANTIN Yellow 4GL  
TUBANTIN Scarlet BNL 200  
TUBANTIN Red BWS  
TUBANTIN Violet BL 200 <sup>16</sup>  
TUBANTIN Blue FGL  
TUBANTIN Dark Blue R  
TUBANTIN Green BL h.c.  
TUBANTIN Grey 4GL <sup>16</sup>  
TUBANTIN Black RD

TUBANTIN Yellow GR  
TUBANTIN Scarlet 4B conc.  
TUBANTIN Bordeaux 3BL <sup>16</sup>  
TUBANTIN Blue 3G  
TUBANTIN Blue 2RL 200 <sup>16</sup>  
TUBANTIN Turquoise FBL conc. <sup>16</sup>  
TUBANTIN Brown GGL <sup>16</sup>  
TUBANTIN Grey CGLL conc. <sup>16</sup>  
TUBANTIN Black RA

TUBANTIN Orange GGLN 200  
TUBANTIN Red F3B conc.  
TUBANTIN Pink 2B  
TUBANTIN Blue GLL 300  
TUBANTIN Blue BRR h.c.  
TUBANTIN Green 5GL conc.  
TUBANTIN Brown BL <sup>16</sup>  
TUBANTIN Black VSF 600  
TUBANTIN Black FR 900

## CATIONIC DYES FOR DYEING OF PAN FIBRES

### 11.1 BEZACRYL

BEZACRYL Flavine 10GFF  
BEZACRYL Red GTL 200  
BEZACRYL Blue GRL 300  
BEZACRYL Black FBL 300

BEZACRYL Gold. Yellow GL 200  
BEZACRYL Red GRL 180  
BEZACRYL Blue FBS  
BEZACRYL Black FDL 200

BEZACRYL Brilliant Red 4G  
BEZACRYL Brilliant Violet 3RN  
BEZACRYL Blue BG 200

<sup>16</sup> contains Cu, for baby wear the content of Cu in the extract should be controlled

## FINISHING AUXILIARIES

### 12.1 SOFTENERS

POLYAVIN PEN  
TUBINGAL RNJ

TUBINGAL 220  
TUBINGAL RRW

TUBINGAL KRE

### 12.2 SILICONE SOFTENERS

ARRISTAN 64  
ARRISTAN 71  
TUBINGAL 3S  
TUBINGAL FMH  
TUBINGAL OHS <sup>17</sup>

ARRISTAN 66  
ARRISTAN 201  
TUBINGAL 9270  
TUBINGAL GSI  
TUBINGAL RGH

ARRISTAN 66 CONC.  
TUBINGAL 2270  
TUBINGAL FAM  
TUBINGAL ISP <sup>17</sup>  
TUBINGAL SMF

### 12.3 SILICONE COMPOUND SOFTENERS

TUBINGAL 2221 <sup>19</sup>  
TUBINGAL RGS  
TUBINGAL RTC

TUBINGAL ACE  
TUBINGAL RMG

TUBINGAL HWS  
TUBINGAL RSK

### 12.4 SOFTENER CONCENTRATES

TUBINGAL 3030

TUBINGAL 4748

TUBINGAL 7023

### 12.5 EASY CARE FINISHING AGENTS AND CATALYSTS

CHT-KATALYSATOR ABT  
REAKNITT BC <sup>18</sup>  
REAKNITT TIO <sup>18</sup>

CHT-KATALYSATOR BFM  
REAKNITT FF <sup>18</sup>  
REAKNITT WL <sup>18</sup>

CHT-KATALYSATOR FS  
REAKNITT MFA <sup>18</sup>  
REAKNITT ZF

### 12.6 HANDLE MODIFIER

ARRISTAN ACS <sup>19</sup>  
ARRISTAN GH <sup>19</sup>

ARRISTAN CPU  
ARRISTAN HM

ARRISTAN EPD  
ARRISTAN RPD FL.

<sup>17</sup> The product contains a small amount of octamethylcyclotetrasiloxane (D4) in its manufacturing recipe. Because D4 is a volatile substance and under usual processing conditions, the limit value < 1000 ppm according to H&M restrictions on the final fabric can be kept.

<sup>18</sup> Fabrics finished only with this product show a formaldehyde value of < 75 ppm, if proper production parameters are kept.

<sup>19</sup> Fabrics finished only with this product show a formaldehyde value of < 16 ppm, if proper production parameters are kept.



## FINISHING AUXILIARIES

### 12.7 SEWING THREAD LUBRICANTS

POLYAVIN 3000  
POLYAVIN COLD  
POLYAVIN UFP

POLYAVIN ANG 35  
POLYAVIN HELP

POLYAVIN BOND <sup>20</sup>  
POLYAVIN HELP TEX

### 12.8 YARN LUBRICANTS

LUSTRAFFIN AS  
LUSTRAFFIN LF CONC  
LUSTRAFFIN SL

LUSTRAFFIN BA  
LUSTRAFFIN SA 88

LUSTRAFFIN DBL  
LUSTRAFFIN RTK

### 12.9 ANTISTATIC AGENTS

AVISTAT 3 P  
AVISTAT GPA

AVISTAT AZ NEU

AVISTAT G 100

### 12.10 ANTIFOAMS

CHT-ENTSCHÄUMER K 50

### 12.11 OTHER FINISHING AGENTS

ARRISTAN AIR  
FLEXOFIX A 30  
iSys SOLAR+  
NouWell SCA <sup>21</sup>

ARRISTAN HPA  
FLEXOFIX FL.  
NouWell E  
NouWell SPA <sup>21</sup>

ARRISTAN HPC  
iSys MTX  
NouWell RLX  
PESOFIX WM

<sup>20</sup> Fabrics finished only with this product show a formaldehyde value of < 75 ppm, if proper production parameters are kept.

<sup>21</sup> The product contains a small amount of octamethylcyclotetrasiloxane (D4) in its manufacturing recipe. Because D4 is a volatile substance and under usual processing conditions, the limit value < 1000 ppm according to H&M restrictions on the final fabric can be kept.

### 13.1 SPINNING LUBRICANTS FOR POLYESTER

DURON 1105 PE	DURON 14	DURON 7024
DURON AF 2170	DURON EF 1882	DURON EF 4044
DURON ES 3151	DURON ES 3165	DURON ES 3176
DURON ES 3184	DURON ES 3188	DURON FF 1995
DURON FF 2084	DURON FF 3185	DURON FF 3190
DURON K 3168	DURON NV 12	DURON NV 2
DURON NV 7	DURON X 730	

### 13.2 SPINNING LUBRICANTS FOR POLYOLEFINE FILAMENTS

DURON OF 1812/80	DURON OF 1851	DURON OF 2148
DURON OF 2168	DURON OF 2173	DURON OF 2196
DURON OF 2199	DURON OF 2202	DURON OF 3174
DURON OF 3201	DURON OF 3206	DURON OF 4013
DURON TX 2080		

### 13.3 SPINNING LUBRICANTS FOR POLYOLEFINE STAPLE FIBRES

AVISTAT 3 P	DURON 1105 PE	DURON K 3168
DURON OF 1510	DURON OF 1543	DURON OF 3850
DURON OF 4012	DURON OS 1547	DURON OS 1547-AV
DURON OS 1547-LA	DURON OS 2206	DURON OS 3034
DURON OS 3136	DURON OS 3151	DURON OS 3188
DURON OS 4012 CO	DURON OS 4022	DURON OS 4056
DURON OS 3176		

### 13.4 SPINNING LUBRICANTS FOR POLYAMIDE

DURON 1105 PE	DURON 14	DURON 7024
DURON AF 2170	DURON AS 1711	DURON ASE 7620
DURON K 2088	DURON NV 12	

### 13.5 LUBRICANTS FOR YARN PRODUCTION

DURON 7024	DURON AC	DURON KG 1710
DURON KG 2450	DURON KG 3010	DURON NV 12
DURON NV 2	DURON NV 7	DURON P 1
DURON SG 2420	DURON SI	DURON TX 2083
DURON VWS	SILIC	VITAGON RS 20

## FIBRE ADDITIVES

### 13.6 CONING OILS

DURON K 2114

DURON TX 2080

DURON TX 4029

### 13.7 SPINNING LUBRICANTS FOR POLYOLEFINE TAPE

DURON 178  
DURON OF 3206  
DURON OF 4035

DURON K 3215  
DURON OF 4004

DURON OF 2148  
DURON OF 4031

### 13.8 SPINNING LUBRICANTS FOR POLYOLEFINE SPUNBOND

DURON 7024  
DURON OF 1547-AV  
DURON OF 4012  
DURON 4048

DURON NV 3180  
DURON OF 1547-LA  
DURON OF 4012 BOT

DURON OF 1547  
DURON OF 2148  
DURON OF 4035

### 13.9 OTHER FIBRE ADDITIVES

DURON TX 2083

DURON WARP WAX 109

HANSA AFE 5711

## COATING

### 14.1 DISPERSIONS / BINDERS

TUBICOAT A 17<sup>22</sup>  
TUBICOAT A 28<sup>22</sup>  
TUBICOAT E 4<sup>22</sup>  
TUBICOAT PU 80  
TUBICOAT VA-XS<sup>22</sup>

TUBICOAT A 19<sup>23</sup>  
TUBICOAT A 36<sup>23</sup>  
TUBICOAT PU 44 K  
TUBICOAT PUS

TUBICOAT A 22<sup>22</sup>  
TUBICOAT A 41<sup>22</sup>  
TUBICOAT PU 60  
TUBICOAT PU-VH NEU

<sup>22</sup> Fabrics finished only with this product show a formaldehyde value of < 75 ppm, if proper production parameters are kept.  
<sup>23</sup> Fabrics finished only with this product show a formaldehyde value of < 16 ppm, if proper production parameters are kept.

## COATING

### 14.2 THICKENING AGENTS

TUBICOAT HEC	TUBICOAT VERDICKER ASD	TUBICOAT VERDICKER HEC
TUBICOAT VERDICKER LP	TUBICOAT VERDICKER PRA	

### 14.3 ANTIFOAMS

TUBICOAT ENTSCHÄUMER BS

### 14.4 CROSSLINKING AND FIXING AGENTS

TUBICOAT FIXIERER AZ	TUBICOAT FIXIERER BT <sup>24</sup>	TUBICOAT FIXIERER FA <sup>25</sup>
TUBICOAT FIXIERER FC <sup>26</sup>	TUBICOAT FIXIERER H 24 <sup>26</sup>	TUBICOAT FIXIERER HT <sup>24</sup>

### 14.5 COMPOUNDS FOR PASTE COATING

TUBICOAT DEP-PU <sup>25</sup>	TUBICOAT MAF <sup>27</sup>	TUBICOAT PERL PU SOFT <sup>25</sup>
TUBICOAT WOT	TUBICOAT WX-TCA 70 <sup>27</sup>	

### 14.6 COMPOUNDS FOR FOAM COATING

TUBICOAT MP-D<sup>27</sup>

### 14.7 FILMS / MEMBRANES / LAMINATING

LAMETHAN ADH-1 <sup>25</sup>	LAMETHAN LB 15-T BR 152	LAMETHAN LB 15-T W 150
LAMETHAN VL-H920 O BR150	LAMETHAN VL-H920 S BR 150	LAMETHAN VL-H920 W BR150
TUBICOAT ASK		

### 14.8 WATER / OIL REPELLENCE

ECOPERL ACTIVE	zeroF 1 <sup>27</sup>
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### 14.9 OTHER COATING AUXILIARIES

TUBICOAT WBV	TUBICOAT SI 55	TUBICOAT EMULGATOR HF
TUBICOAT MOP NEU	TUBICOAT WEISS EU	

<sup>24</sup> Fabrics finished only with this product show a formaldehyde value of < 300 ppm, if proper production parameters are kept.

<sup>25</sup> Fabrics finished only with this product show a formaldehyde value of < 75 ppm, if proper production parameters are kept.

<sup>26</sup> Please note that the product is based on a blocked isocyanate polymer. We expect that no free or blocked isocyanates above H&M limit can be found on finished textile, if used according to our technical recommendations.

<sup>27</sup> Fabrics finished only with this product show a formaldehyde value of < 16 ppm, if proper production parameters are kept.

## TEXTILE PRINTING

### 15.1 DISPERSE THICKENER

PRISULON STAR                      PRISULON T 10

### 15.2 REACTIVE THICKENER

PRISULON CR-F 40

### 15.3 UNIVERSAL THICKENER

PRISULON CMS 10                      PRISULON DCA 1200 S                      PRISULON DCA 130 S  
PRISULON DCA 90

### 15.4 CARPET THICKENER

PRISULON GTS 800                      TUBIVIS UNIQUE 431                      TUBIVIS UNIQUE 432  
TUBIVIS UNIQUE 432 HD

### 15.5 CARPET AUXILIARIES

RAPIDOPRINT STRETCH

### 15.6 OXIDIZING / REDUCING AGENTS

RAPIDOPRINT XR GRANULAT

### 15.7 PRINTING AUXILIARIES

RAPIDOPRINT LM                      RAPIDOPRINT RRE

## TEXTILE PRINTING

### 15.8 BLANKET ADHESIVES

PRINTPERFEKT STIC SP 2	PRINTPERFEKT STIC SP 5	TUBIGUM DK 15
TUBIGUM RPA 130	TUBIGUM RPA FL.	TUBIGUM RPD FL.
TUBIGUM RS FLUESSIG	TUBIGUM Z 12	

### 15.9 PRINTING WASHING-OFF

PRINTOBLANC CPA NEU

### 15.10 PIGMENT THICKENERS

TUBIVIS DL 600	TUBIVIS DL 650	TUBIVIS STAR
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### 15.11 BINDERS

TUBIFAST AS 10 <sup>28</sup>	TUBIFAST AS 30 <sup>28</sup>	TUBIFAST AS 40 <sup>29</sup>
TUBIFAST AS 4010 <sup>28</sup>	TUBIFAST AS 4510 <sup>28</sup>	TUBIFAST AS 4510 FF
TUBIFAST AS 4083 FF		

### 15.12 FIXING AGENTS

TUBASSIST FIX 102 W <sup>30</sup>	TUBASSIST FIX 104 W	TUBASSIST FIX 120 W <sup>31</sup>
TUBIFIX ML 55 <sup>29</sup>	TUBIFIX P 70 <sup>31</sup>	

### 15.13 SOFTENERS

TUBISOFT PCE	TUBISOFT PS	TUBISOFT SEM
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### 15.14 PIGMENT RHEOLOGICAL ADDITIVES

TUBIGAT AR	TUBIGAT R 130 NEU	TUBIGAT R 25
TUBIGAT WAF 20 <sup>29</sup>		

<sup>28</sup> Fabrics finished only with this product show a formaldehyde value of < 16 ppm, if proper production parameters are kept.

<sup>29</sup> Fabrics finished only with this product show a formaldehyde value of < 75 ppm, if proper production parameters are kept.

<sup>30</sup> Fabrics finished only with this product show a formaldehyde value of < 300 ppm, if proper production parameters are kept.

<sup>31</sup> Please note that the product is based on a blocked isocyanate polymer. We expect that no free or blocked isocyanates above H&M limit can be found on finished textile, if used according to our technical recommendations.



## TEXTILE PRINTING

### 15.15 WHITE AND LAC PASTES

PRINTPERFEKT LAC 77 <sup>32</sup>	PRINTPERFEKT BLANC FLEX <sup>33</sup>	PRINTPERFEKT BLANC FF
PRINTPERFEKT LAC FLEX <sup>33</sup>	PRINTPERFEKT BLANC 670 <sup>32</sup>	TUBILAC 115 A <sup>32</sup>
TUBILAC 55 NF	TUBIPRINT WEISS 450 AV <sup>32</sup>	TUBIPRINT WEISS 450 DV <sup>33</sup>
TUBIPRINT WEISS K 70	TUBIPRINT WEISS K 80	TUBIPRINT WEISS K 90

### 15.16 FOIL ADHESIVES

TRANSLAC BOND 55

### 15.17 PIGMENT GLOSS PASTES

PRINTPERFEKT GD 270	TUBISCREEN GD 200	TUBISCREEN GD 300
TUBISCREEN GD-G <sup>32</sup>	TUBISCREEN GD-G CONC. <sup>32</sup>	

### 15.18 PIGMENT DISCHARGE PASTES

PRINTPERFEKT DC 8	PRINTPERFEKT DC 8 WHITE	TUBISCREEN DC-AGENT <sup>33</sup>
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### 15.19 SPECIAL PRINTING PROCESS AUXILIARIES

RAPIDOPRINT CT 110	TUBISCREEN FAT 100 <sup>33</sup>
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### 15.20 ANTIFOAMS AND DEAERATING AGENTS

CHT-ENTSCÄUMER BSN	RAPIDOPRINT CT AF	RAPIDOPRINT SC 10
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<sup>32</sup> Fabrics finished only with this product show a formaldehyde value of < 16 ppm, if proper production parameters are kept.

<sup>33</sup> Fabrics finished only with this product show a formaldehyde value of < 75 ppm, if proper production parameters are kept.

## TEXTILE PRINTING

### 15.21 RUNNING IMPROVER

TUBIGAT A 60

TUBIPRINT BL

TUBIPRINT RETARDER

### 15.22 PIGMENT DYEING

PADICOLL CA-AF<sup>34</sup>  
PADICOLL PAD

PADICOLL DYE  
PADICOLL PRO

PADICOLL ONE<sup>35</sup>

### 15.23 SCREEN PRINTING INK

ALPAPRINT CAT

ALPAPRINT CLEAR

ALPAPRINT WHITE

### 15.24 SILICONE COMPOUND FOR COATING

ALPATEC 30142 A  
ALPATEC 30143 B  
ALPATEC 30203 A  
ALPATEC 30340 B

ALPATEC 30142 B  
ALPATEC 30191 A  
ALPATEC 30203 B  
ALPATEC 745

ALPATEC 30143 A  
ALPATEC 30191 B  
ALPATEC 30340 A

COLORMATCH SI 005 WEISS  
COLORMATCH SI 115 GOLGELB  
COLORMATCH SI 215 ROT  
COLORMATCH SI 285 VIOLET  
COLORMATCH SI 355 MARINE  
COLORMATCH SI 465 OLIVGRÜN

COLORMATCH SI 105 LEMON  
COLORMATCH SI 185 ORANGE  
COLORMATCH SI 225 DUNKELROT  
COLORMATCH SI 305 BLAU  
COLORMATCH SI 405 GRÜN  
COLORMATCH SI 705 SCHWARZ

<sup>34</sup> Fabrics finished only with this product show a formaldehyde value of < 75 ppm, if proper production parameters are kept.  
<sup>35</sup> Fabrics finished only with this product show a formaldehyde value of < 16 ppm, if proper production parameters are kept.

## PIGMENT PRODUCTS FOR PRINTING

### 16.1 BEZAPRINT GOT / BEZAPRINT

BEZAPRINT Citron GOT	BEZAPRINT Yellow GOT	BEZAPRINT Orange GOT
BEZAPRINT Red GOT	BEZAPRINT Blue GOT	BEZAPRINT Navy GOT
BEZAPRINT Black GOT <sup>36</sup>	BEZAPRINT Citron 10G	BEZAPRINT Yellow 3GT
BEZAPRINT Yellow 2GN	BEZAPRINT Yellow RR	BEZAPRINT Yellow 4RM <sup>37</sup>
BEZAPRINT Orange 2G <sup>37</sup>	BEZAPRINT Orange RG <sup>37</sup>	BEZAPRINT Orange GT
BEZAPRINT Scarlet GRL	BEZAPRINT Scarlet RR	BEZAPRINT Red KGC
BEZAPRINT Red GCA	BEZAPRINT Red KF	BEZAPRINT Red 2BN
BEZAPRINT Pink BW	BEZAPRINT Violet FB	BEZAPRINT Violet R
BEZAPRINT Bordeaux K2R	BEZAPRINT Blue TB	BEZAPRINT Blue BT
BEZAPRINT Blue BN	BEZAPRINT Blue RT <sup>36</sup>	BEZAPRINT Blue RTM
BEZAPRINT Blue RR	BEZAPRINT Navy RRM	BEZAPRINT Navy TR <sup>36</sup>
BEZAPRINT Turquoise GT	BEZAPRINT Green BS	BEZAPRINT Green BT
BEZAPRINT Green 2B	BEZAPRINT Olive Green BT <sup>36</sup>	BEZAPRINT Brown RP
BEZAPRINT Brown TM <sup>36</sup>	BEZAPRINT Grey BB <sup>36</sup>	BEZAPRINT Black DT <sup>36</sup>
BEZAPRINT Black DW <sup>36</sup>	BEZAPRINT Black BDC <sup>36</sup>	

### 16.2 BEZAFLUOR

BEZAFLUOR Violet BR

### 16.3 COLORMATCH

CM 102 Citron	CM 106 Yellow	CM 110 Golden Yellow
CM 180 Orange <sup>38</sup>	CM 200 Scarlet	CM 210 Red
CM 221 Carmine	CM 222 Marsred	CM 225 Dark Red
CM 240 Pink	CM 250 Fuchsia	CM 280 Violet
CM 300 Blue	CM 350 Navy	CM 360 Denim <sup>36</sup>
CM 380 Turquoise	CM 400 Green	CM 450 Light Green
CM 550 Brown	CM 700 Black <sup>36</sup>	CM 740 Black <sup>36</sup>

Please note that the combination of pigments containing Pigment Orange 13 and / or Pigment Orange 34 with pigments containing Pigment Black 7 is not recommended any more.

<sup>36</sup> contains Pigment Black 7

<sup>37</sup> contains Pigment Orange 13 and / or Pigment Orange 34

## FLOCK FOR TEXTILE CLOTHING

### 17.1 FLOCK ADDITIVES

TUBASSIST T 526 W

### 17.2 FLOCK ADHESIVES

TUBVINYL 235 S <sup>38</sup>

### 17.3 FLOCK TRANSFER AUXILIARIES

TUBASSIST ELASTOMELT 90 F TUBASSIST MELT F

## SIZING ADHESIVES

### 18. SIZING ADHESIVES

TUBOFLEX PVA 80

TUBOMIX OCE

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<sup>38</sup> Fabrics finished only with this product show a formaldehyde value of < 75 ppm, if proper production parameters are kept.

## GARMENT AUXILIARIES

### 19.1 AMYLASES

BEISOL AFG-G

BEISOL T 2090-G

### 19.2 CELLULASES

BEIZYM ACE-G

BEIZYM HC-G

BEIZYM TOP H.C.

BEIZYM BPN 300-G

BEIZYM NGS

BEIZYM UL-G

BEIZYM BPN-G

BEIZYM NGS-SB

### 19.3 LACCASES

DENIMCOL LAC-LRE

### 19.4 ANTIBACKSTAINING WASHING & DISPERSING AGENTS

DENIMCOL CLEAN-ABS NEU

DENIMCOL CLEAN-JWH

DENIMCOL DIS-DPE

DENIMCOL DIS-KEB

DENIMCOL DIS-OL

DENIMCOL WASH-42

DENIMCOL WASH-FDO NEU

DENIMCOL WASH-POO

DENIMCOL WASH-TBU

DENIMCOL CLEAN-CSM

DENIMCOL CLEAN-JWP

DENIMCOL DIS-ESW <sup>39</sup>

DENIMCOL DIS-MIP <sup>39</sup>

DENIMCOL DIS-SMS <sup>39</sup>

DENIMCOL WASH-CPD

DENIMCOL WASH-JET

DENIMCOL WASH-RGN

DENIMCOL WASH-VW

DENIMCOL CLEAN-CUP

DENIMCOL CLEAN-SMX

DENIMCOL DIS-INO

DENIMCOL DIS-NWS

DENIMCOL DIS-VD NEU

DENIMCOL WASH-DSU

DENIMCOL WASH-P WHITE

DENIMCOL WASH-SE

DENIMCOL WASH-WN

### 19.5 SOFTENERS

DENIMCOL SOFT-47 <sup>40</sup>

DENIMCOL SOFT-71

DENIMCOL SOFT-2270

DENIMCOL SOFT-HWS

DENIMCOL SOFT-MIC

DENIMCOL SOFT RGH

DENIMCOL SOFT-SI 70 <sup>40</sup>

DENIMCOL SOFT-64

DENIMCOL SOFT-71 CONC

DENIMCOL SOFT-4748

DENIMCOL SOFT-ISP

DENIMCOL SOFT-OHS <sup>40</sup>

DENIMCOL SOFT-RMG

DENIMCOL SOFT-SMF

DENIMCOL SOFT-66

DENIMCOL SOFT-220

DENIMCOL SOFT-9270

DENIMCOL SOFT-KRE

DENIMCOL SOFT-PEN

DENIMCOL SOFT-RSK

DENIMCOL SOFT-VWS

### 19.6 RESIN FINISHING AGENTS

DENIMCOL RES-ABT

DENIMCOL RES-FS

DENIMCOL RES CCP-T <sup>41</sup>

DENIMCOL RES-TIO <sup>41</sup>

DENIMCOL RES-CCP <sup>41</sup>

DENIMCOL RES-ZF

<sup>39</sup> Fabrics finished only with this product show a formaldehyde value of < 16 ppm, if proper production parameters are kept.

<sup>40</sup> The product contains a small amount of octamethylcyclotetrasiloxane (D4) in its manufacturing recipe. Because D4 is a volatile substance and under usual processing conditions, the limit value < 1000 ppm according to H&M restrictions on the final fabric can be kept.

<sup>41</sup> Fabrics finished only with this product show a formaldehyde value of < 75 ppm, if proper production parameters are kept.

## 19.7 AUXILIARIES FOR SPECIAL EFFECTS

DENIMCOL FIX-ICB CONC. <sup>42</sup>	DENIMCOL SPEC VA 55	DENIMCOL SPEC-AF <sup>43</sup>
DENIMCOL SPEC-AS 30 <sup>43</sup>	DENIMCOL SPEC-BIC	DENIMCOL SPEC-BIO
DENIMCOL SPEC-BOND 55	DENIMCOL SPEC-CPU	DENIMCOL SPEC-DAP
DENIMCOL SPEC-DCA <sup>44</sup>	DENIMCOL SPEC-EPD	DENIMCOL SPEC-FIX ML 55 <sup>44</sup>
DENIMCOL SPEC-FAT 100 <sup>45</sup>	DENIMCOL SPEC-FIX 104 W	DENIMCOL SPEC-FIX FC <sup>45</sup>
DENIMCOL SPEC-FIX-HT <sup>46</sup>	DENIMCOL SPEC-FOAM	DENIMCOL SPEC-FTL
DENIMCOL SPEC-GD 200	DENIMCOL SPEC-GD 300	DENIMCOL SPEC-GDG <sup>43</sup>
DENIMCOL SPEC-GDX <sup>44</sup>	DENIMCOL SPEC-GOLD <sup>43</sup>	DENIMCOL SPEC-HEC
DENIMCOL SPEC-LAC 110 <sup>43</sup>	DENIMCOL SPEC-MGR <sup>43</sup>	DENIMCOL SPEC-MS <sup>43</sup>
DENIMCOL SPEC-PUS	DENIMCOL SPEC-RPD	DENIMCOL SPEC-WEISS K 70
DENIMCOL SPEC-WEISS K 90		

## 19.8 GARMENT DYE

DENIMCOL BINDER GF-C <sup>43</sup>	DENIMCOL BLANC-HA <sup>47</sup>	DENIMCOL BLANC-HA D3 <sup>47</sup>
DENIMCOL BLANC-HAS4 <sup>47</sup>	DENIMCOL F	DENIMCOL FIX-0290
DENIMCOL FIX-3005	DENIMCOL FIX-ACP	DENIMCOL FIX-ACP 200 %
DENIMCOL FIX-CTK	DENIMCOL FIX-FSN	DENIMCOL FIX-GF
DENIMCOL FIX-IN 35	DENIMCOL FIX-OS	DENIMCOL LEV-A
DENIMCOL LEV-M	DENIMCOL LEV-PF	DENIMCOL LEV-SBFN
DENIMCOL PCS	DENIMCOL SEL 200	DENIMCOL XRN PEARLS

## 19.9 OTHER GARMENT AUXILIARIES

DENIMCOL AR	DENIMCOL BINDER-CA <sup>44</sup>	DENIMCOL BINDER-PAC <sup>43</sup>
DENIMCOL BINDER-RE NEU	DENIMCOL BOOST CL	DENIMCOL BOOST PP
DENIMCOL BSN	DENIMCOL BUFFER-KP	DENIMCOL BUFFER-NVMV 200
DENIMCOL CDA	DENIMCOL GAL	DENIMCOL HV
DENIMCOL LOK	DENIMCOL LUB-109	DENIMCOL LUB-BPA
DENIMCOL LUB-TCC	DENIMCOL DIS-MR	DENIMCOL NCD
DENIMCOL PEX	DENIMCOL SD	organIQ ASSIST
organIQ BLEACH T	organIQ BUFFER AO	

<sup>42</sup> The product contains a small amount of hexamethylene diisocyanate (HMDI) in its recipe. According to our estimation a limit value of < 1 ppm can be obtained with regard to the applied quantity under suitable production conditions. Our estimation notwithstanding, on basis of empirical values, we would like to inform you that the content of HDMI on the fabric depends very much on the applied product, the processing conditions and the applied product quantity. The exact content on the fabric can be determined only by measuring it directly on the production material.

<sup>43</sup> Fabrics finished only with this product show a formaldehyde value of < 16 ppm, if proper production parameters are kept.

<sup>44</sup> Fabrics finished only with this product show a formaldehyde value of < 75 ppm, if proper production parameters are kept.

<sup>45</sup> Please note that the product is based on a blocked isocyanate polymer. We expect that no free or blocked isocyanates above H&M limit can be found on finished textile, if used according to our technical recommendations.

<sup>46</sup> Fabrics finished only with this product show a formaldehyde value of < 300 ppm, if proper production parameters are kept.

<sup>47</sup> The product contains a small amount of aniline as an impurity in its recipe. According to our estimation a limit value of < 10 ppm can be obtained with regard to the applied quantity under suitable production conditions. Therefore the limit value according to the H&M restrictions can be kept.





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