



**DR. PETRY**  
TEXTILE AUXILIARIES

## Garment News 2014





## 1. New enzymes

PERIZYM 58 d.c.

PERIZYM 69

PERIZYM 69 d.c.

PERIZYM 69 conc.

PERIZYM COLD

PERIZYM ACE 10

## 2. New anti-backstaining agents

PERLAVIN CLEAN

PERLAVIN BSP NEW

PERLAVIN BSP NEW/P 100

PERLAVIN AB/W 83



### 3. New special products

PERICOAT PU CAT

PERICOAT LEF

PERICOAT SIS

PERICOAT SOT

PERICOAT ST SPECIAL

PERIPRET SPIDER

PERISOFT BLF

PERFIXAN PC 55 NEW

PERFIXAN NOF PC

PERISTAL IGO 75

PERICOLOR YELLOW FL 7G



**DR. PETRY**  
TEXTILE AUXILIARIES

**PERIZYM 58 dc**

**High-concentrated  
neutral cellulase**



# PERIZYM 58 d.c.



DR. PETRY  
TEXTILE AUXILIARIES

**Chemistry:** Special enzyme proteins

**Consistence:** Amber liquid

**Properties:**

- double concentrated version of PERIZYM 58
- highly efficient neutral cellulase
- removal of fibre fluffs
- less loss of weight and strength compared to acid cellulases
- working range between pH 5 and 8
- less backstaining compared to acid cellulases on blue denim articles
- on coloured fabric, there is less bleeding and therefore less colour changing

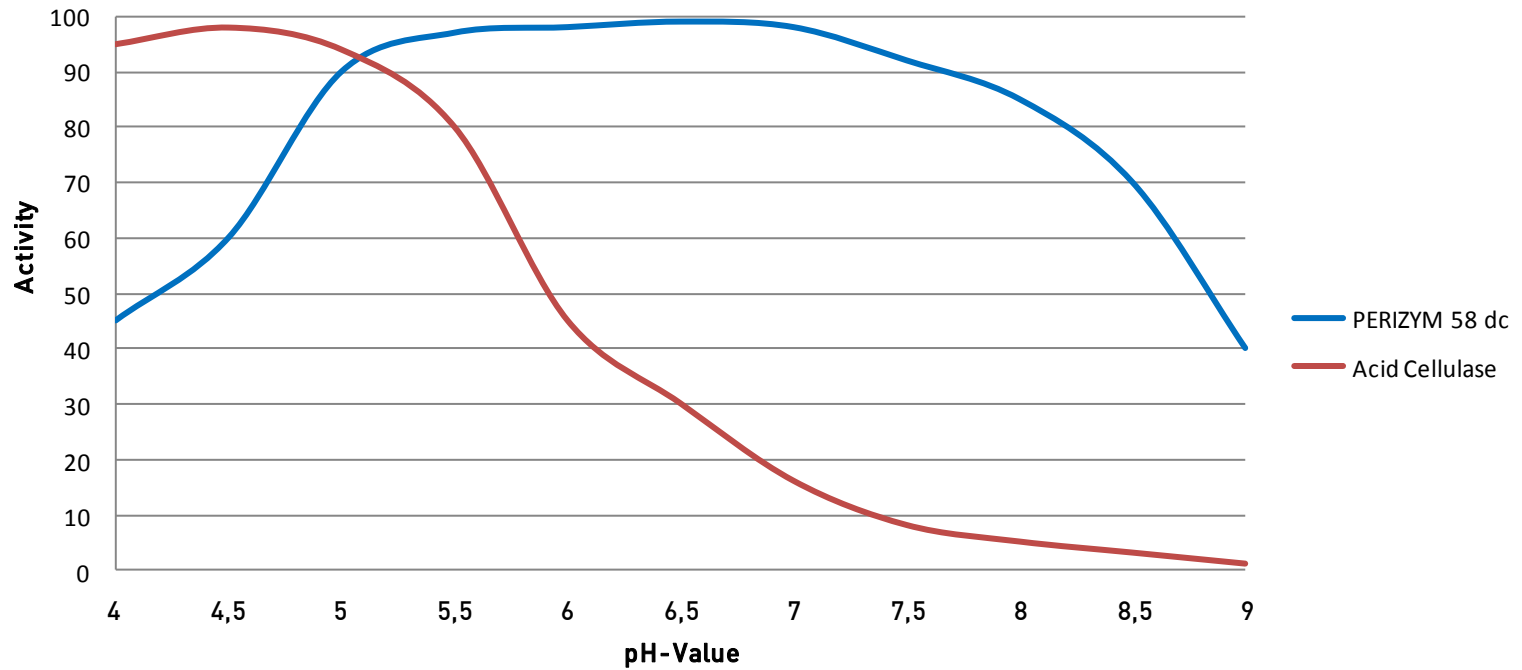
## PERIZYM 58 d.c.



DR. PETRY  
TEXTILE AUXILIARIES

Usage amount: 0.25 – 1.5 g/l  
LR: 1: 4 – 1:10  
Temperature: 45 – 55 °C  
pH: 5 – 8; optimum at 6.0 – 7.0  
Treatment time: 15 – 60 minutes  
Enzyme stop: 10 minutes  $\geq$  75 °C or 10 minutes at pH  $\geq$  9.0

## Activity of PERIZYM 58 d.c. and acid cellulase





**DR. PETRY**  
TEXTILE AUXILIARIES

**PERIZYM 69**  
**PERIZYM 69 d.c.**  
**PERIZYM 69 conc.**

**New generation of  
neutral cellulases**





# PERIZYM 69/69 d.c./69 conc.



DR. PETRY  
TEXTILE AUXILIARIES

**Chemistry:** Special enzyme proteins

**Consistence:** Amber liquid

**Properties:**

- highly cost effective and efficient neutral cellulase
- for biofinishing and stone washing
- less loss of weight and strength compared to acid cellulases
- working range between pH 5 and 8
- less backstaining compared to acid cellulases on blue denim articles
- on coloured fabric, there is less bleeding and therefore less colour changing

# PERIZYM 69/69 d.c./69 conc.



DR. PETRY  
TEXTILE AUXILIARIES

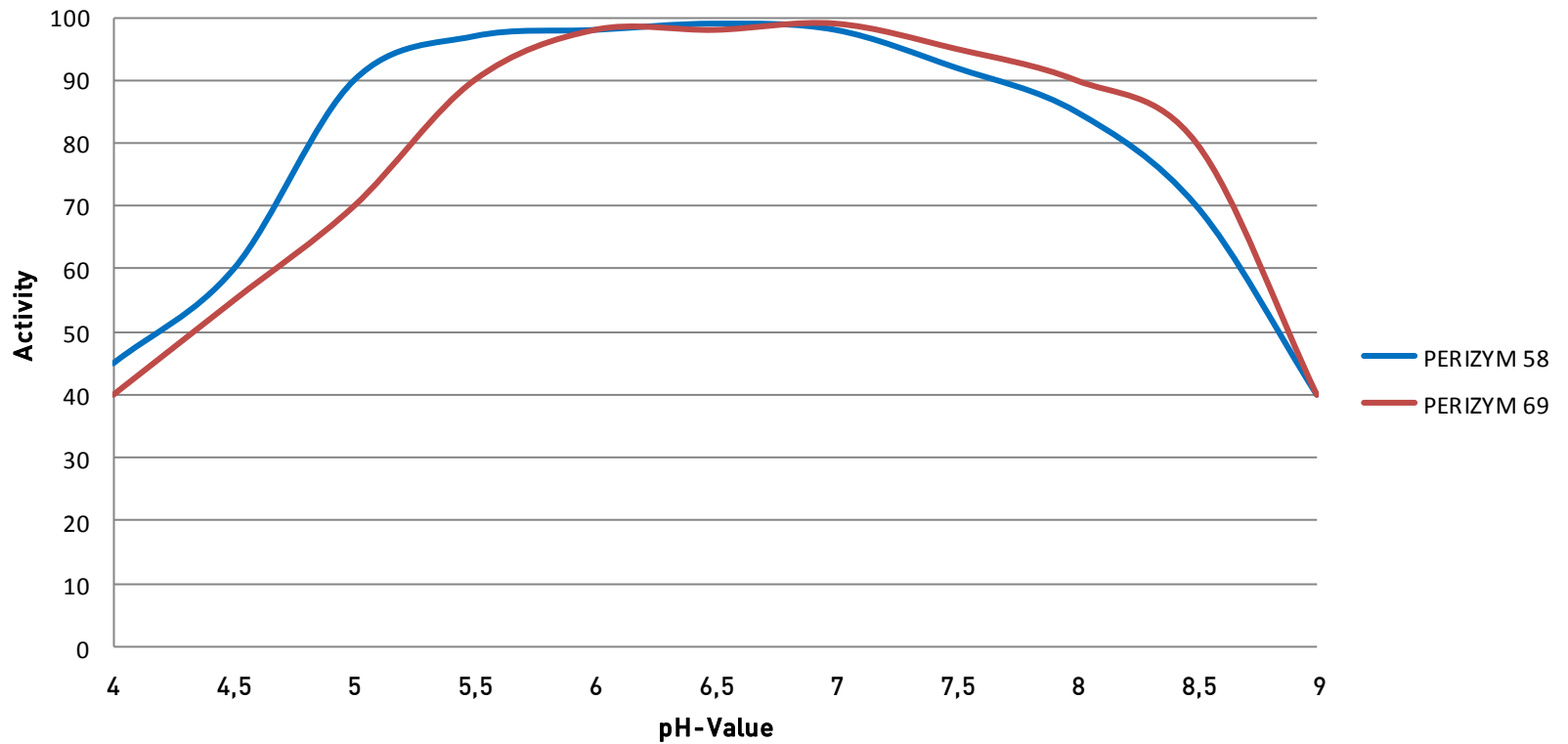
	PERIZYM 69	PERIZYM 69 d.c.	PERIZYM 69 conc.
Usage amount [g/l]:	0.5 – 4.0	0.25 – 2.0	0.1 – 0.5
LR:	1:4 – 1:10		
Temperature [°C]:	45 – 60		
pH	5 – 8; optimum at 6.0 – 7.0		
Treatment time [min.]	15 – 60		
Enzyme stop	10 minutes $\geq$ 75 °C or 10 minutes at pH $\geq$ 9.0		

# PERIZYM 58 d.c. / PERIZYM 69 d.c.



DR. PETRY  
TEXTILE AUXILIARIES

**Activity of PERIZYM 58 d.c. and PERIZYM 69 d.c.**





**DR. PETRY**  
TEXTILE AUXILIARIES

## **PERIZYM COLD**

**High-concentrated  
neutral cellulase**



# PERIZYM COLD



DR. PETRY  
TEXTILE AUXILIARIES

**Chemistry:** Special enzyme proteins

**Consistence:** Amber liquid

**Properties:**

- high-concentrated neutral cellulase
- highly efficient at low temperatures
- removal of fibre fluffs
- less loss of weight and strength compared to acid cellulases
- working range between pH 5 and 8
- less backstaining compared to acid cellulases on blue denim articles
- on coloured fabric, there is less bleeding and therefore less colour changing

# PERIZYM COLD



DR. PETRY  
TEXTILE AUXILIARIES

Usage amount:	0.5 – 1.0 g/l
LR:	1:4 – 1:10
Temperature:	30 – 45 °C
pH:	5 – 8; optimum at 6.5
Treatment time:	15 – 60 minutes
Enzyme stop:	10 minutes $\geq$ 80 °C or 10 minutes at pH $\geq$ 9.5



**DR. PETRY**  
TEXTILE AUXILIARIES

## **PERIZYM ACE 10**

**High-concentrated  
acid cellulase**



# PERIZYM ACE 10



DR. PETRY  
TEXTILE AUXILIARIES

**Chemistry:** Special enzyme proteins

**Consistence:** Amber liquid

**Properties:**

- high-concentrated modified acid cellulase
- very good cost-performance ratio
- removal of fibre fluffs
- working range between pH 4.5 and 5.5
- less backstaining compared to other acid cellulases on blue denim articles



# PERIZYM ACE 10



DR. PETRY  
TEXTILE AUXILIARIES

Usage amount: 0.3 – 1.5 g/l  
LR: 1:4 – 1:10  
Temperature: 50 – 60 °C  
pH: 4.5 – 6.0; optimum at 5.0  
Treatment time: 15 – 45 minutes  
Enzyme stop: 10 minutes  $\geq$  80 °C or 10 minutes at pH  $\geq$  9



**DR. PETRY**  
TEXTILE AUXILIARIES

## **PERLAVIN BSP NEW**

**New washing  
agent in order to  
avoid backstaining**



# PERLAVIN BSP NEW



DR. PETRY  
TEXTILE AUXILIARIES

**Chemistry:** Modified polyester

**Consistence:** Viscous dispersion

**Ionogenity:** Nonionic

**Properties:**

- not enzyme toxic, usage in all enzyme applications
- improves the surface smoothness
- good soil release properties
- improved hydrophilicity, especially on synthetic garments
- lowering of the static charge
- acts as crease preventing agent

# PERLAVIN BSP NEW



DR. PETRY  
TEXTILE AUXILIARIES

Usage amount: 0.3 – 1.0 g/l

LR: 1:4 – 1:10

Temperature: 20 – 80 °C

Treatment time: 5 – 60 minutes

Concentrate  
available: PERLAVIN BSP NEW/P100



**DR. PETRY**  
TEXTILE AUXILIARIES

**PERLAVIN BSP  
NEW/P100**

**Antibackstaining  
concentrate**



# PERLAVIN BSP NEW/P100



DR. PETRY  
TEXTILE AUXILIARIES

**Chemistry:** Modified polyester

**Consistence:** Beige powder

**Ionogenity:** Nonionic

**Properties:**

- not enzyme toxic, usage in all enzyme applications
- improves the surface smoothness
- good soil release properties
- improved hydrophilicity, especially on synthetic garments
- lowering of the static charge
- acts as crease preventing agent



## PERLAVIN BSP NEW/P100



DR. PETRY  
TEXTILE AUXILIARIES

PERLAVIN BSP NEW/P 100 has to be diluted very thoroughly before adding into the drum washing machine

**Stirring unit with possibility for heating or using hot water**

Place 81 parts hot (minimum 70 °C) water in the vessel

add 19 parts PERLAVIN BSP NEW/P 100 during stirring in the hot water.

By constant stirring a homogeneous, lump free dispersion is produced within around 30 minutes.

# PERLAVIN BSP NEW/P100



DR. PETRY  
TEXTILE AUXILIARIES

Usage amount: 0.05 – 0.3 g/l

LR: 1:4 – 1:10

Temperature: 20 – 80 °C

Treatment time: 5 – 60 minutes





**DR. PETRY**  
TEXTILE AUXILIARIES

## **PERLAVIN AB/W 83**

**New generation  
antibackstaining  
concentrate**



## PERLAVIN AB/W 83



DR. PETRY  
TEXTILE AUXILIARIES

PERLAVIN AB/W 83 is a high concentrated antibackstaining, dispersing and washing agent

**Chemistry:** Modified polyester and quaternary ammonium compounds

**Consistence:** High viscous, yellowish dispersion

**Ionogenity:** Slightly cationic



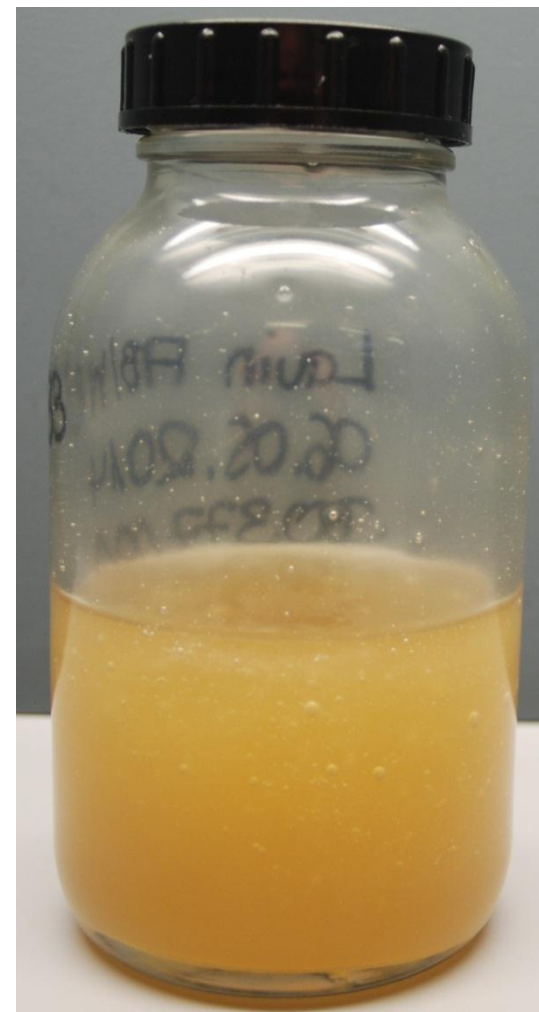
- Properties:**
- not enzyme toxic, usage in all enzyme applications
  - improves the surface smoothness
  - good soil release properties
  - improved hydrophilicity, especially on synthetic garments
  - lowering of the static charge
  - acts as crease preventing agent
  - dilutable with water in all ratios
  - very good dispersing properties of dyestuffs and pigments
  - prevent and clean redeposition of the fabric by detached dyestuff particles

## PERLAVIN AB/W 83



DR. PETRY  
TEXTILE AUXILIARIES

Usage amount: 0.1 – 1.0 g/l  
LR: 1:4 – 1:10  
Temperature: 20 – 80 °C  
Treatment time: 5 – 60 minutes





**DR. PETRY**  
TEXTILE AUXILIARIES

## **PERICOAT PU CAT**

**Modified cationic  
polyurethane  
dispersion**



# PERICOAT PU CAT



DR. PETRY  
TEXTILE AUXILIARIES

- Chemistry:** Modified aliphatic polyurethane
- Consistence:** Opal, slightly viscous dispersion
- Ionogenity:** Cationic
- Solubility:** Dilutable with cold water



## Application fields:

- printing on all kind of fibres, to modify the affinity for dyes on printed areas
- coating; to modify the affinity for dyes on coated areas
- foulard application, to get deeper colours with wash-out effects
- crock fastness improvement, in exhaust process together with softening step
- special effects like foam-washing, to get unlevelled, unique effects

# PERICOAT PU CAT



DR. PETRY  
TEXTILE AUXILIARIES



**Foam-Dye**  
Dyeing with  
reactive dyes



**Paint-Dye**  
Dyeing with  
reactive dyes



# PERICOAT PU CAT



DR. PETRY  
TEXTILE AUXILIARIES



Printing +  
Dyeing with acid  
dyes



Printing +  
Dyeing with  
reactive dyes



**DR. PETRY**  
TEXTILE AUXILIARIES

## **PERICOAT LEF**

**Leather-like  
effects**



- Chemistry:** Polymercompound of vinylacetate/ethylene copolymer and aluminiumsilicates
- Consistence:** Viscous beige dispersion
- Ionogenity:** Anionic
- Properties:**
- high pigment binding capacity
  - forms solid leather-like effects
  - washpermanent after curing
  - miscible with most anionic or nonionic polymers and pigments
  - application by spraying or brushing

# PERICOAT LEF



DR. PETRY  
TEXTILE AUXILIARIES

Brush: 600 g/l PERICOAT LEF  
x g/l PERICOLOR WHITE P/YW  
y g/l PERICOLOR P pigment

Brushing the paste on the respective areas of the garment

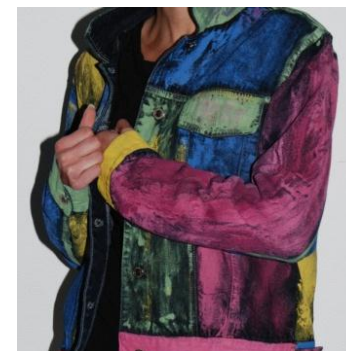
Drying: 60° C, 20 minutes

Afterwards break/wrinkle the film. To improve the handle brushing the following products

Finishing: 200 – 300 g/l PERICOAT SOT  
(by brush) x g/l PERISOFT BLF  
y g/l PERICOLOR P pigment

Drying: 80° C, 20 minutes

Curing: 140° C, 15 minutes



Feel free to modify our application recommendation by your individual ideas and processes.

# PERICOAT LEF



DR. PETRY  
TEXTILE AUXILIARIES





**DR. PETRY**  
TEXTILE AUXILIARIES

## **PERIPRET SIS**

**Permanent  
silicone**



- Chemistry:** Polymercompound based on crosslinkable silicones
- Consistence:** Pasty white emulsion
- Ionogenity:** Nonionic
- Properties:**
- forms very soft and flexible films
  - wash-permanent after curing
  - miscible with polymers and pigments
  - application by spraying or brushing
  - application on woolen garments
  - to modify the handle
  - prevent felting

# PERIPRET SIS



DR. PETRY  
TEXTILE AUXILIARIES

**Spraying:** 771 g/l PERIPRET SIS  
4 g/l PERICOLOR  
GREEN FL/YG  
225 g/l water

**Curing:** 10 minutes, 140 °C







**DR. PETRY**  
TEXTILE AUXILIARIES

## **PERICOAT SOT**

**The new  
soft touch  
polymer**





- Chemistry:** Polymercompound based on silicones and acrylates
- Consistence:** Pasty white dispersion
- Ionogenity:** Anionic
- Properties:**
- forms very soft, shiny and flexible films
  - washpermanent after curing
  - miscible with polymers and pigments
  - application by spraying or brushing
  - improvement of crocking fastness on woven garments

# PERICOAT SOT



DR. PETRY  
TEXTILE AUXILIARIES

**Prewashing:** 2.0 g/l PERIZYM 58  
1.0 g/l PERLAVIN NIC  
55 °C, 20 min., rinse cold

**Dyeing:** 3.0 g/l Na<sub>2</sub>CO<sub>3</sub>  
0.5 g/l PERIGEN FTR NEW  
0.5 % PERICOLOR YELLOW FL/7G  
10.0g/l NaCl  
94 °C, 30 min., rinse cold

**Spray:** 975 g/l PERICOAT SOT  
25 g/l PERICOLOR YELLOW

**Drying:** 60 °C, 15 min.  
**Curing:** 140 °C, 10 min.

**Softwash:** 3.0 % PERISOFT BLF  
1.0 g/l PERISTAL E  
40 °C, 20 min., tumbling





**DR. PETRY**  
TEXTILE AUXILIARIES

## **PERICOAT ST SPECIAL**

**Formaldehyde-  
free silicone  
acrylate compound**



# PERICOAT ST SPECIAL



DR. PETRY  
TEXTILE AUXILIARIES

- Chemistry:** Polymercompound based on silcones and formaldehyd-free acrylates
- Consistence:** Pasty white dispersion
- Ionogenity:** Anionic
- Properties:**
- forms very soft, shiny and flexible films
  - complete formaldehyde-free
  - washpermanent after curing
  - miscible with polymers and pigments
  - application by spraying or brushing
  - Improvement of crocking fastness on woven garments

# PERICOAT ST SPECIAL



DR. PETRY  
TEXTILE AUXILIARIES

Spray: 979 g/l PERICOAT ST SPECIAL  
14.3g/l PERICOLOR RED P/YR  
6.7g/l PERICOLOR BLUE P/YB

Drying: 80 °C, 15 min.  
Curing: 140 °C, 10 min.





**DR. PETRY**  
TEXTILE AUXILIARIES

## **PERISOFT BLF**

**Silicone macro  
emulsion with  
colour deepening  
effect**



# PERISOFT BLF



DR. PETRY  
TEXTILE AUXILIARIES

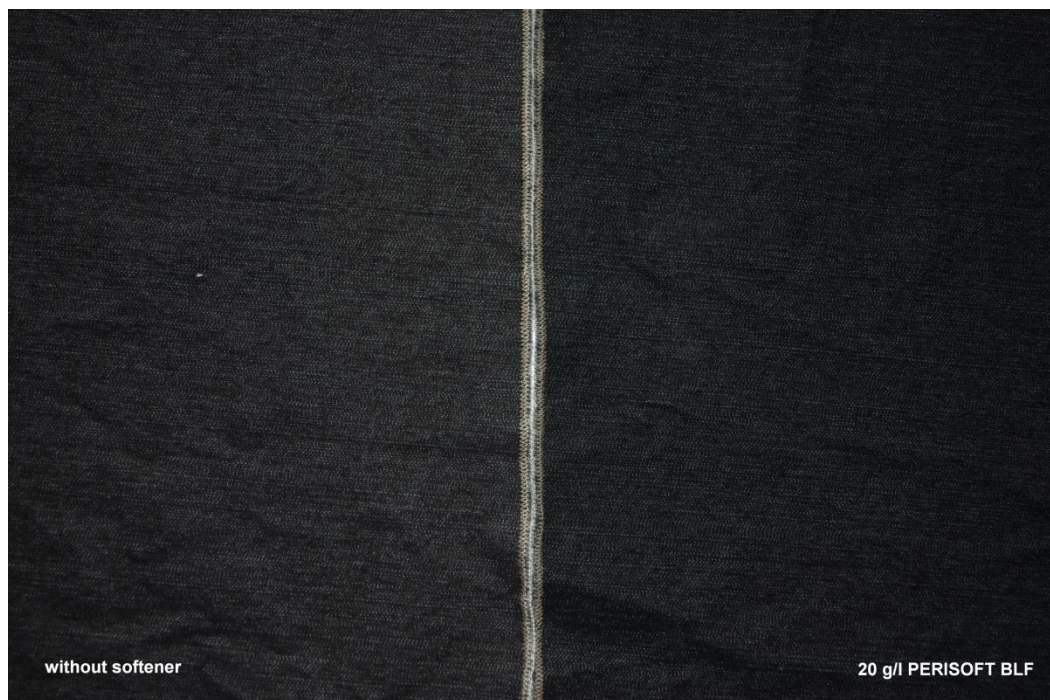
- Chemistry:** Modified functional silicones
- Consistence:** white, liquid emulsion
- Properties:**
- high-concentrated macro emulsion
  - washpermanent
  - very soft and smooth handle
  - good elasticity and excellent dimension stability
  - provides perfect colour deepening and shiny effects
  - improves the sewability of textiles and garments



# PERISOFT BLF



DR. PETRY  
TEXTILE AUXILIARIES





**DR. PETRY**  
TEXTILE AUXILIARIES

## **PERFIXAN PC 55 NEW**

**Crosslinking system  
for permanent  
wrinkles**



# PERFIXAN PC 55 NEW



DR. PETRY  
TEXTILE AUXILIARIES

- Chemistry:** Modified dimethylol dihydroxy ethylene urea
- Consistence:** Colourless liquid
- Properties:**
- self-catalysing crosslinking agent
  - high concentrated and wash-permanent resin
  - low content of formaldehyde (< 75 ppm, Oeko-Tex standard 100)
  - miscible with PERIPRET FINISH (acrylic polymer)
  - application by spraying or dipping-hydroextract

# PERFIXAN PC 55 NEW



DR. PETRY  
TEXTILE AUXILIARIES

Guiding recipe for permanent wrinkles, spray application:

100 - 200 g/l      PERSIFAN PC 55 NEW  
30 - 150 g/l      PERIPRET FINISH

Spray the whole garment (15 – 25 % liquor pick up), double spray on demanded wrinkle areas and form the creases by clips.

Drying:                      80 °C, 20 minutes

Curing:                      140 °C, 15 minutes

Remove the clips and soften the garments





**DR. PETRY**  
TEXTILE AUXILIARIES

## **PERFIXAN NOF-PC**

**Formaldehyde-free  
crosslinking system  
for permanent  
wrinkles**



# PERFIXAN NOF-PC



DR. PETRY  
TEXTILE AUXILIARIES

**Chemistry:** Modified dimethyl dihydroxy ethylene urea

**Consistence:** Colourless liquid

**Properties:**

- self-catalysing crosslinking agent
- high concentrated and wash-permanent resin
- free of formaldehyde (Oeko-Tex standard 100)
- miscible with PERIPRET FFA (acrylic polymer, free of formaldehyde)
- application by spraying or dipping-hydroextract

**Guiding recipe for permanent wrinkles, spray application:**

**200 – 250 g/l      PERFIXAN NOF-PC**

**30 – 200 g/l      PERIPRET FFA**

**Spray the whole garment (15 – 25 % liquor pick up), double spray on demanded wrinkle areas and form the creases by clips.**

**Drying:                      80 °C, 20 minutes**

**Curing:                      140 °C, 15 minutes**

**Remove the clips and soften the garments**

# PERFIXAN NOF-PC



DR. PETRY  
TEXTILE AUXILIARIES

## Spray:

200 g/l      PERFIXAN NOF-PC

180 g/l      PERIPRET FFA

## Forming creases

Drying:      80 °C, 25 min.

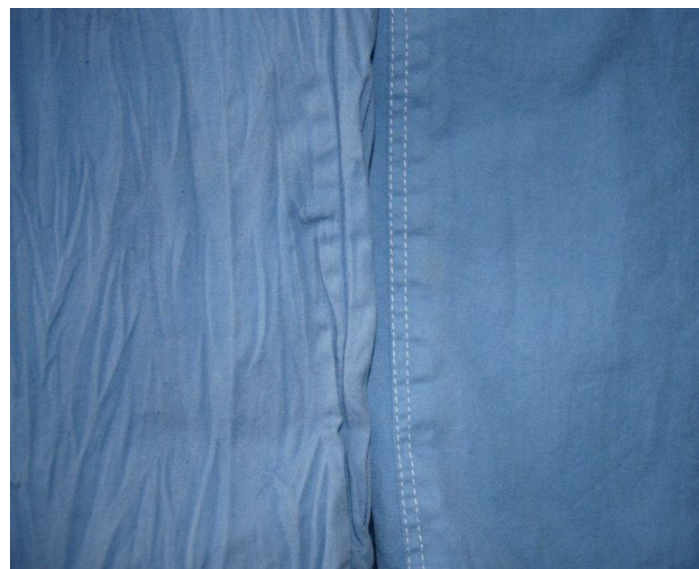
Curing:      140 °C, 15 min.

## Softwash:

3.0 %      PERISOFT LOF/R

0.5 g/l      acetic acid

15 min, 40 °C







**DR. PETRY**  
TEXTILE AUXILIARIES

**PERIPRET  
SPIDER**

**Spidernet effects**

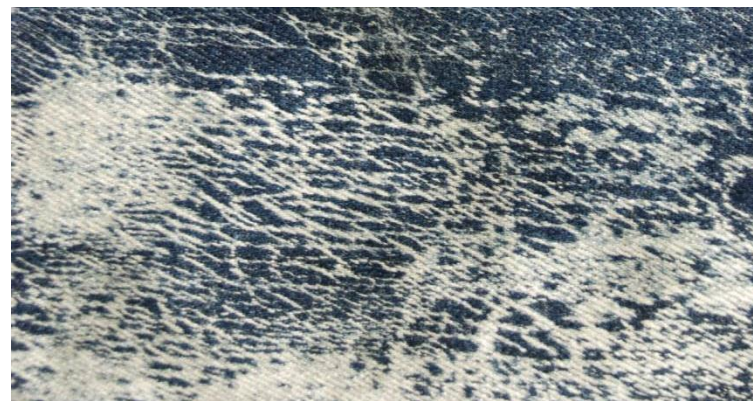
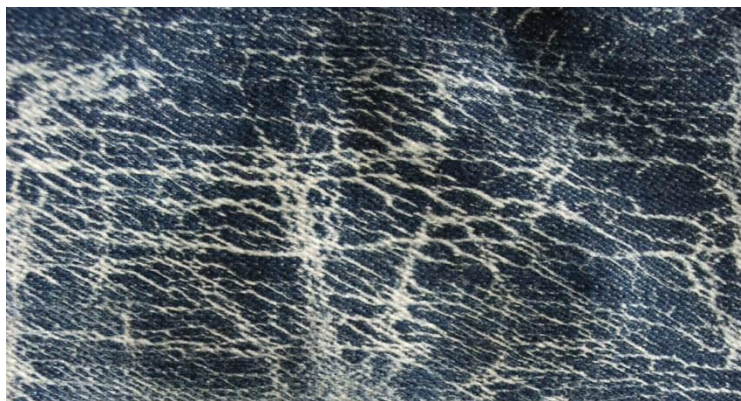


# PERIPRET SPIDER



DR. PETRY  
TEXTILE AUXILIARIES

- Chemistry:** Saturated hydrocarbons, solid
- Consistence:** White pastilles
- Properties:**
- solid wax
  - melting temperature at around 60 °C
  - no drying after application necessary
  - easy to wash out after application



- PERIPRET SPIDER is melting at temperatures around 65 °C
- Heat up PERIPRET SPIDER to 70 – 80 °C in a heat resistant pot. Higher temperatures should be avoided because the product penetrates too much into the fabric.
- Brush the paste on the desired areas of, for example, indigo-dyed garments. As soon as PERIPRET SPIDER is cooled down to room temperature a hard film is created.
- Crack the film by hand.
- After cracking the film a liquor of bleaching lye, like  $\text{KMnO}_4$ , should be brushed on the pre-treated areas. Wait until the reaction is finished.
- The film of PERIPRET SPIDER can be easily removed by washing at 75 – 80 °C in a drum washing machine. At the same step the removal / neutralisation of the bleaching agent can take place.

# PERIPRET SPIDER



DR. PETRY  
TEXTILE AUXILIARIES

Flyer  
available



DR. PETRY  
TEXTILE AUXILIARIES

## PERIPRET SPIDER

Spider finish



DR. PETRY  
TEXTILE AUXILIARIES

## PERIPRET SPIDER

### CHEMICAL TYPE

Saturated hydrocarbons, solid

### PRODUCT CHARACTERISTICS AND BENEFITS

PERIPRET SPIDER forms a hard film which can be easily cracked. Bleaching liquors can penetrate the cracks thus a spider-net-like pattern can be created. PERIPRET SPIDER has the advantage of being non-aqueous and therefore no drying is necessary after its application.

### APPLICATION

- PERIPRET SPIDER is melting at temperatures around 65°C.
- Heat up PERIPRET SPIDER to 70–80 °C in a heat resistant pot. Higher temperatures should be avoided because the product penetrates too much into the fabric.
- Brush the paste on the desired areas of, for example, indigo-dyed garments. As soon as PERIPRET SPIDER is cooled down to room temperature a hard film is created.
- Crack the film by hand.
- After cracking the film a liquor of bleaching lye, like  $KMnO_4$ , should be brushed on the pre-treated areas. Wait until the reaction is finished.
- The film of PERIPRET SPIDER can be easily removed by washing at 75–80°C in a drum washing machine. At the same step the removal/neutralisation of the bleaching agent can take place.

### QUANTITY USED - WASHING

Washing

2–3 g/l PERLAVIN PAM  
possibly neutralising agent like sodium bisulfite

20–30 minutes at 75–80°C  
rinse twice

After rinsing a conventional softening step is recommended

### TEXTILCHEMIE DR. PETRY GMBH

Ferdinand-Lessing-Strasse 57  
72770 Reutlingen  
Germany  
Telefon: +49 7121 9589-0  
Telefax: +49 7121 9589-33  
E-Mail: [office@drpetry.de](mailto:office@drpetry.de)  
Internet: [www.drpetry.de](http://www.drpetry.de)

The above indications are based on the latest state of our knowledge. Due to different operational conditions and requirements these are guidelines only. A legally binding instruction cannot be given from our indication. Our technical staff will always be at your disposal to support you in testing our auxiliaries and to answer further technical questions. 5/2014



**DR. PETRY**  
TEXTILE AUXILIARIES

## **PERISTAL IGO 75**

**Ecological  
bleaching of blue  
denim**





- Chemistry:** Special oxidising agents and bio polymers
- Consistence:** White granulate
- Properties:**
- ecologically harmless bleaching alternative
  - no strength loss at all on cotton
  - inactivation of cellulases (no enzyme stop after enzymatic “stonewash” required)
  - creating a dirty look on indigo dyed denim
  - specially suitable for lycra-containing blends
  - works at temperatures between 65° C and 80 °C
  - easy application, contains buffers and catalyst

## PERISTAL IGO 75



DR. PETRY  
TEXTILE AUXILIARIES

- Using amount:** liquor ratio 1:4 – 1:10  
0.5 – 4 % PERISTAL IGO 75  
related to the weight of the goods
- pH value:** 4.0 – 5.0 (buffered)
- Temperature:** 65 – 80 °C
- Treatment:** 15 – 45 minutes, after obtaining  
desired bleaching the addition of  
alkaline will stop the bleaching  
procedure

# PERISTAL IGO 75



DR. PETRY  
TEXTILE AUXILIARIES

Pre-treatment with:  
1.0 g/l PERIZYM 58  
20 min, 50 °C, 2 x rinse



1 g/l PERISTAL IGO 75

1 g/l PERISTAL IGO 75 +  
4 g/l PERISTAL WWH

10 g/l sodium hypochlorite

0.2 g/l PERISTAL IGO 75

1.5 g/l PERIZYM DEN







**DR. PETRY**  
TEXTILE AUXILIARIES

**PERICOLOR  
YELLOW FL/7G**

**Fluorescent  
direct dyestuff**



# PERICOLOR YELLOW FL/7G



DR. PETRY  
TEXTILE AUXILIARIES

Chemistry:	Stilbene dyestuff
Consistence:	Yellow powder
Solubility:	60 g/l at 90 °C
Dyeing temperature:	98 °C
Dyeing pH:	Neutral up to slightly alkaline

# PERICOLOR YELLOW FL/7G



DR. PETRY  
TEXTILE AUXILIARIES

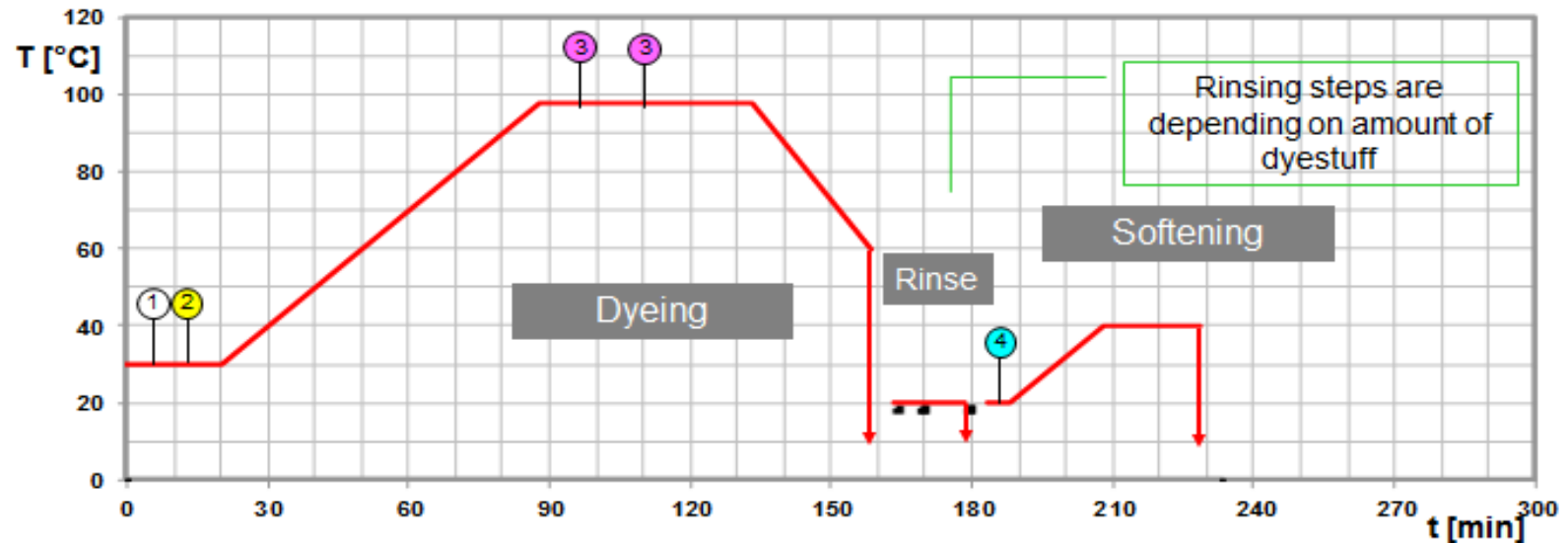
## Dyeing guideline for PERICOLOR YELLOW FL/7G

① 0.5 - 2 g/l PERIGEN FTR/C  
0-1 g/l Soda ash

② x % PERICOLOR YELLOW FL/7G

③ d g/l NaCl or Na<sub>2</sub>SO<sub>4</sub>

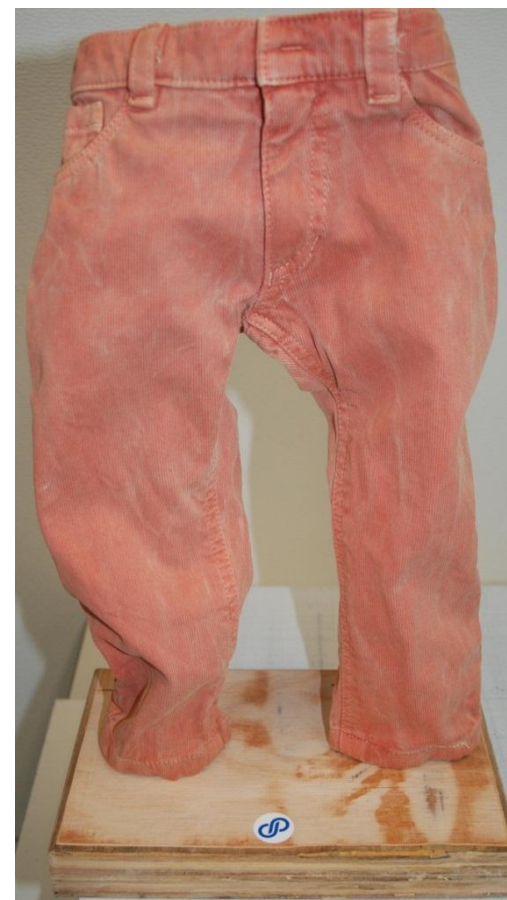
④ e pH 5-6  
% Softener



# PERICOLOR YELLOW FL/7G



DR. PETRY  
TEXTILE AUXILIARIES





**DR. PETRY**  
TEXTILE AUXILIARIES

Textilchemie Dr. Petry GmbH  
Ferdinand-Lassalle-Straße 57  
72770 Reutlingen  
Germany

Telefon +49 7121 9589-0  
Telefax +49 7121 9589-33

E-Mail [office@drpetry.de](mailto:office@drpetry.de)  
Internet [www.drpetry.de](http://www.drpetry.de)



**DR. PETRY**  
TEXTILE AUXILIARIES

The above indications are based on the latest state of our knowledge. Due to different operational conditions and requirements these are guidelines only. A legally binding assurance cannot be drawn from our indications. Our technical staff will always be at your disposal to support you in testing our auxiliaries and to answer further technical questions.

05/2014