# **FINISHES**



**Code:** FTS 0315 037

Description: Featuress and finishes

## FEATURES POLYMERS

Plastic is called to all materials with different structure which by means of polymer processes have properties such as flexibility to be moulded and adapted to different shapes. Polymers used in Actiu Products:

## POLYURETHANE - (TPU) - (PU integral) (Features):

(TPU) - (PUR) Poliurethane. Versatile material with compact surface and soft inner. It is comfortable and solid, pleasant and resistance.

Elastomer to absorb impacts or constant movements.

Long lasting without any maintenance.

Great resistance to over weight as well as capacity to absorb impacts.

Polyurethane used by Actiu is resistant to grease, oil, cracks, tears and hea t(up to 80°C). All standard pieces fulfill DIN 9835 quality requirements.

Polyurethane **(PUR)** is used in Mit, Transit beam seatings, Passport and Avant frames (3 mm thickness). Viva and Spacio is manufactured with **SEBS** double layer padded injection (one side injection).

## PP - COPOLYMER POLYPROPYLENE (Features):

Additive with antistatic, antioxidant and UV stabilizers. High impact ressistance and strength. Used for structural elements supporting moderate weights. (seats and shell backs...)

Excellent results under tensions and stretching Mechanical resistant Flexibility Resistant in open air Reduced crystallization, no cracks with weather changes Low thermal expansion Easy to fix it Perfect Chemical properties a s well as impermeability ones Test passed with potable water ANSI/NSF 61 Non environmental damages due to the lack of chemical and adhesive products Fire-resistant

## ABS (Features):

Thermoplastic material derivative from acrylonitrile, butadiene and styrene. The **ABS** structure is a composition of a copolymer vitreous (styrene – acrylonitrile) and an elastic, mainly polymer of butadiene. The **ABS** is a plastic stronger than the polystyrene due to the nitrile groups.

### Properties:

The ABS outstands because of its tension and impact resistance in the same material as well as it is a light material.

Mechanical and impact resistance combined ease to be processed. Thermal resistant. Chemical resistant. Fatigue resistant Hardness and rigidity Ductility to low temperature Impact resistant Fusion resistant Easy to be processed (fluidity) Brilliance Opaque. Can be pigmented with most of the colors. Non-toxic and colourless. Can be extruded, injected moulded, blow moulded and pressed.

TECHNICAL DATA		
Thermal resistance	High	
Permeability	All degrees are considered waterproof but slightly steam permeable	
Friction properties	Not degraded by oils. Resistant where high friction	
Dimensional stability	High. One of its most remarkable features	
Pigmentation	Most of these resins are available in the pricelist standandard colours	
Mixing ability	Easily mixed (between themselves and with other plastic materials) by means of adhesives	
Absorption capacity	Low	
Chemical resistance	Very highly water-proof and resistant to inorganic salts, alkalis and to many acids. They are soluble in esters, acetone, aldehydes and in some chlorinated hydrocarbons	
Fatigue resistance	IResistant to cyclic or permanent loads up to 0,7 Kg mm <sup>2</sup>	

## ■ PA+FV POLYAMIDE WITH FIBREGLASS (Features):

Polyamide **(PA)** with 40% fibreglass additive with antistatic, antioxidant and UV stabilizers. Supports higher impacts than Polypropylene **(PP)** with a higher rigidity and strength. Used for seating bases which support major weights 5 mm thickness

## OTHER TECHNICAL PLASTICS

PA06 used as inner components. (PU) Polyurethane and thermoplastic rubber used for padding.

The different plastic materials used as well as factors such as sunlight, temperature, humidity.... can create slight colour variations. It is recommended to check finishes on the **ACTIU** card before ordering a reference. Tone and intensity may vary depending on the material, texture and shine of each one.

## **FEATURES POLYMERS**

## Technical Profile

## FINISHES POLYURETHANE (PU)















01 (PUR)

00 (PUR)

## FINISHES POLYPROPYLENE (PP)



07 (PP)















23 (PP)

11 (PA)

01 (ABS)



14 (PA)

21 (PP)

FINISHES ABS







00 (ABS)



25 (PP)

01 (PA)

ACABADOS · FINISHES · FINITIONS

## BEECH LACQUERED PLYWOOD

Beech and oak plywood used in natural and wengue tones. Beech plywood based on sheets 10 mm thickness. Fibers are placed in a perpendicular and transversal way to provide dimensional stability as well as long lasting and resistant. Recyclable





26 NATURAL OAK



29 WENGUE LAQUERED OAK

### **STEEL**

3 mm steel seats and backs available in different finishes





72 SILVER

0 70 WHITE

**STEEL** 

3 mm steel seats and backs available in different finishes





77 RED



2 mm steel seats and backs available in different finishes



77 RED



78 BLACK



72 SILVER

72 SILVER

## FEATURES FABRIC

#### FABRIC GROUP "T"

Material	Polyester <sup>®</sup> Non metallic dyestuffs	100%
Weight	lin. metre aprox. grams	260
Width	cm	170
Abrasion resistance	rubs - EN ISO 12947-2 (Martindale)	50.000
Cleaning	Vacuum regulary. Wipe clean with damp clo	oth or shampoo
	using propietary upholstery shampoo.	
Flammability	BS EN 1021 - 1 & 2 (Cigarette & Match) • BS 7176	2007 Low Hazard
	<ul> <li>BS 476 Part 7 Class 1</li> </ul>	
	Will also pass other flammability standards.	
	Flame retardant performance is dependent	upon the foam
	used and fireproof treatment.	
Subject to changes and o	colour diferences	

## GROUP "T" (Finishes)







T 90



T 82



T 85



T 84













T 87

#### FABRIC GROUP "L"

Material	Recyclrd Polyester® Non metallic dyestuffs	100%
Weight	lin. metre aprox. grams	260
Width	cm	170
Abrasion resistance	rubs - EN ISO 12947-2 (Martindale)	50.000
Colour fastness to light	scale 1-8, max. 8 - EN ISO 105 - B02	6
Colour fastness to rubbing	scale 1-5, max. 5 - EN ISO 105X12 (wet/dry)	4/4
Cleaning	Vacuum regulary. Wipe clean with damp cloth	ı or shampoo
	using propietary upholstery shampoo.	
Flammability	BS EN 1021 - 1 & 2 (Cigarette & Match) • BS 7176:20	07 Low Hazard
	<ul> <li>BS 476 Part 7 Class 1</li> </ul>	
	Will also pass other flammability standards.	
	Flame retardant performance is dependent upon the foam	
	used and fireproof treatment.	
Subject to changes and cold	our diferences	

## GROUP "L" (Finishes)









L 88

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FABRIC GROUP "C"		FIRE RETARDANT
Material	Xtreme FlameRetardant® Non metallic dyestuffs	100%
Weight	lin. metre aprox. grams	310
Width	cm	140
Abrasion resistance	rubs - EN ISO 12947-2 (Martindale)	100.000
Cleaning	🐨 Vacuum regulary. Wipe clean with damp cloth c	r shampoo
	using propietary upholstery shampoo.	
Flammability         BS EN 1021 - 1&2 (Cigarette & Match) • BS 7176:2007 Li           DS EN 1021 - 1 & 2 (Digarette & Match) • DS 7176:2007 Li         D D D D D D D D D D D D D D D D D D D		Low Hazard
	NF-P-92-507 M1 • UNI 8456 & UNI 9174 Class 1	
	Will also pass other flammability standards.	
	Flame retardant performance is dependent upon the	foam used
	and fireproof treatment.	
Subject to changes and cold	our diferences	

## GROUP "C" (Finishes)



C 83



C 87





C 82



**C** 84





#### FABRIC GROUP "K"

Polyester® 100% free of heavy Metals	100%
lin. metre aprox. grams	675
cm	145
rubs - EN ISO 12947-2 (Martindale)	80.000
scale 1-5, max. 5 - EN ISO 12945-2	4-5
scale 1-8, max. 8 - EN ISO 105 - B02	5-7
scale 1-5, max. 5 - EN ISO 105X12 (wet/dry)	4-5/4-5
Wipe clean with damp cloth.	
BS EN 1021 - 1&2 • Calif. Tech. Bull. 117,E • Önorm B 3825 B1 3800 - Q1 UK • UNI 9175 Class 1   EMME Will also pass other flammability standards. Flame retardant performance is dependent upon the foam used and fireproof treatment.	
	Polyester® 100% free of heavy Metals lin. metre aprox. grams cm rubs - EN ISO 12947-2 (Martindale) scale 1-5, max. 5 - EN ISO 12945-2 scale 1-8, max. 8 - EN ISO 105 - B02 scale 1-5, max. 5 - EN ISO 105X12 (wet/dry) Wipe clean with damp cloth. BS EN 1021 - 1&2 • Calif. Tech. Bull. 117,E • Önorm B 3 01 UK • UNI 9175 Class 1 I EMME Will also pass other flammability standards. Flame retardant performance is dependent up used and fireproof treatment.

FABRIC	GROUP	"D"
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Material	Polyester® 100% high tenacity polyester	100%
Weight	lin. metre aprox. grams	440
Width	cm	148
Abrasion resistance	rubs - EN ISO 12947-2 (Martindale)	65.000
Colour fastness to light	scale 1-8, max. 8 - EN ISO 105 - B02	5
Colour fastness to rubbing	scale 1-5, max. 5 - EN ISO 105X12 (wet/dry)	4/4
Cleaning	Wipe clean with damp cloth.	
Flammability	BS EN 1021 - 1&2 • BS 7176 : 1995 LOW HAZARD • BS 476 PART 7 CLASS 1 • DIN 4102 B1 • NF - P - 92 -503 M1 • CSE RF 1/75/A, CSE RF 3/77 Class 1 Will also pass other flammability standards. Flame retardant performance is dependent upon the foam used and firsproof treatment	
Subject to changes and colo	ur diferences	

## **FINISHES CARD K**

The upholstery from the finishes card D will continue until end of stock. Upon completion, it will be withdrawn from the pricelist, although there will be a stock for orders made during 2015.

## ■ GROUP "K" (Finishes)



### **FINISHES CARD D**

The upholstery from the finishes card D will continue until end of stock, extinguishing its production and then eliminated from the standard offer once stocks run out.

#### ■ GROUP "D" (Finishes)







D 84

MELANGE GROUP "M"		FIRE RETARDANT
Material	Trevira CS	100%
Weight	lin. metre aprox. grams	470
Width	cm	140
Abrasion resistance	rubs - EN ISO 12947-2 (Martindale)	100.000
Pilling	scale 1-5, max. 5 - EN ISO 12945-2	4-5
Colour fastness to light	scale 1-8, max. 8 - EN ISO 105 - B02	5-7
Colour fastness to rubbing	scale 1-5, max. 5 - EN ISO 105X12 (wet/dry)	4-5
Cleaning	🐨 🐨 Shrinkage: <3%	P
US ACT	Pass Heavy Duty Upholstery	
Flammability	BS EN 1021 1&2 • BS 5852 crib 5 • FAR/JAR 25853 • DIN 4	102:B1 •
	NFP 92-503:M1 • BS 7176 Med.Hazard • IMO Res. A 652 (1	6] •
	UNI 9175 class 1   EMME • Calif. Tech. Bull. 117,E • Önorm	n B 3825 B1/Q1
	• BS 5852 p1 0&1 • MED Certificate IMO • AM 18 - NF D 60 - 013	
	Will also pass other flammability standards.	
	Flame retardant performance is dependent upon the foa reproof treatment.	m used and fi-

Subject to changes and colour diferences

## ■ GROUP "M" (Finishes)





M 19







M 12

M 14

M 18

M 22

M 20



M 13

M 10

#### HARLEQUÍN GROUP "H" - FABRIC MESH

Material	Polyester	100%
Weight	lin. metre aprox. grams	510
Width	cm	160
Abrasion resistance	rubs - EN ISO 12947-2 (Martindale)	100.000
Pilling	scale 1-5, max. 5 - EN ISO 12945-2	5
Colour fastness to light	scale 1-8, max. 8 - EN ISO 105 - B02	5-7
Colour fastness to rubbing	scale 1-5, max. 5 - EN ISO 105X12 (wet/dry)	4-5
US ACT	Pass Heavy Duty Upholstery	
Cleaning	dry cleaning 🕑	P-cleaning
	💮 Shrinkage: max 4,5%	
	💮 Shrinkage: max 6,0%	
Flammability	BS EN 1021 -1&2 • BS 5852 P1 - 0 • Calif. Tech	n. Bull. 117,E
	Will also pass other flammability standards.	
	Flame retardant performance is dependent u	pon the foam
	used and fireproof treatment.	

Subject to changes and colour diferences

## ■ GROUP "H" (Finishes)



#### OMEGA GROUP "G" - FABRIC MESH

Material	Polyester	100%
Weight	lin. metre aprox. grams	500
Width	cm	160
Abrasion resistance	rubs - EN ISO 12947-2 (Martindale)	100.000
Pilling	scale 1-5, max. 5 - EN ISO 12945-2	5
Colour fastness to light	scale 1-8, max. 8 - EN ISO 105 - B02	5-7
Colour fastness to rubbing	scale 1-5, max. 5 - EN ISO 105X12 (wet/dry)	4-5
US ACT	Pass Heavy Duty Upholstery	
Cleaning	dry cleaning 🕑	P-cleaning
	💮 Shrinkage: max 2,5%	
	💮 Shrinkage: max 4,5%	
Flammability	BS EN 1021 - 1&2 • BS 5852 P1 - 0 • Calif. Tech	n. Bull. 117,E
	Will also pass other flammability standards.	
	Flame retardant performance is dependent u	pon the foam
	used and fireproof treatment.	
Subject to changes and colo	ur diferences	

## ■ GROUP "G" (Finishes)



G 13

G 19

#### FABRIC GROUP "N"

	a	
Material	Coating: PVC	86%
	Textile: CO/PES	14%
Weight	g/m² - DIN 53352	630
Width	cm - DIN 53353	95-115
Abrasion resistance	BS 5690 (Martindale)	≥ 100.000
Colour fastness to light	scale 1-8, max. 8 - DIN 75202	6-7
Colour fastness to rubbing	scale 1-5, max. 5 (wet/dry) - DIN 54021	4-5
Cleaning	Rub gently with damp cloth or sponge. Do not use multi-purpose products	
Flammability	EN1021 1&2	
Subject to changes and colo	ur diferences	

## ■ GROUP "N" (Finishes)



## FABRIC GROUP "P" - Cow grain leather

Material	First quality selected leather (Cow grain leather)	100%
Finish	First quality leather semi-aniline (Chrome tanning)	100%
Width	cm	80-110
Tear resistance	DIN 53329	> 20 N
Bending resistance	DIN 53351	Min. 100.000 C
Grip Finish	IUF 470	min. 1,5N/10mm
pH of the aqueous excerpt	DIN 53312	> 3,5 N
Colour fastness to light	DIN 50004	5
Colour fastness to rubbing	DIN53339 (wet/dry)	250 °C - 1000 °C
Cleaning	Wipe clean with damp cloth.	
Flammability	BS5852:90	
Subject to changes and cold	ur diferences	

## ■ GROUP "P" (Finishes)



P 10







P 18

#### FABRIC GROUP "LEATHER FACE"

Material	Leather Fibres	100%
Finish	Poliurethane PU soft finish	100%
Abrasion resistance	rubs - EN ISO 12947-2 (Martindale)	45.000
Colour fastness to rubbing	ISO 105X12 (wet/dry)	> 500 cycles (Wet)
		> 2.000 cycles (Dry)
Cleaning	Wipe clean with damp cloth.	
Flammability	BS EN 1021 - 1:2006 (Cigarette) • BS EI	N 1021 - 2:2006 (match)
Cubicat to abandoo and cale	un diference e	

Subject to changes and colour diferences

## LEATHER FACE (Finishes)



## BEECH LACQUERED PLYWOOD (Shell plywood)



**18 NATURAL LAQUERED BEECH** 

26 NATURAL OAK



14 CHESTNUT



**19** WENGUE LAQUERED OAK



00 WHITE



#### **07** RED

Plywood board made of natural beech or Oak. Boards are 10 mm thickness. Fibers are placed in a perpendicular and transversal way to provide dimensional stability as well as long lasting and resistant. Recyclable.

## FEATURES FABRIC MESH

#### PLUS - FABRIC MESH

High tenacity polyester	64%
Polyamide	36%
lin. metre aprox. grams	450
cm	140
rubs - EN ISO 12947-2 (Martindale)	100.000
scale 1-8, max. 8 - EN ISO 105 - B02	5-7
scale 1-5, max. 5 - EN ISO 105X12 (wet/dry)	4-5
Vacuum cleaning, cleaning with dry foam.	
BS EN 1021 - 1:1994 Part 1	
Thanks to its fabric technical properties prevent gradual deformations. Constantly adapts to any user's positions and also helps the user's back to maintain a regular tempera- ture because of the fabric transpiration. Mesh structure is physically prepared to resist scratches or damages produ- ced by sharp items recovering thus its initial state by exten- ding the end product's life	
	High tenacity polyester Polyamide Lin. metre aprox. grams cm rubs - EN ISO 12947-2 (Martindale) scale 1-8, max. 8 - EN ISO 105 - B02 scale 1-5, max. 5 - EN ISO 105X12 (wet/dry) Vacuum cleaning, cleaning with dry foam. BS EN 1021 - 1:1994 Part 1 Thanks to its fabric technical properties pre deformations. Constantly adapts to any user's p also helps the user's back to maintain a regu ture because of the fabric transpiration. Mesh physically prepared to resist scratches or dam ced by sharp items recovering thus its initial st ding the end product's life

## ■ FABRIC MESH "PLUS" (Finishes)



#### NET - FABRIC MESH - Black Colour

Material	High tenacity polyester	55%
	Polyamide	45%
Weight	lin. metre aprox. grams	390
Width	cm	140
Abrasion resistance	rubs - EN ISO 12947-2 (Martindale)	100.000
Pilling	scale 1-5, max. 5 - EN ISO 12945-2	ţ
Colour fastness to light	scale 1-8, max. 8 - EN ISO 105 - B02	(
Colour fastness to rubbing	scale 1-5, max. 5 - EN ISO 105X12 (wet/dry)	4-5
Cleaning	Vacuum cleaning, cleaning with dry foam.	
Flammability	EN 1021/1	

#### NET - FABRIC MESH - Colours

Material	High tenacity polyester	64%
	Polyamide	36%
Weight	lin. metre aprox. grams	420
Width	cm	140
Abrasion resistance	rubs - EN ISO 12947-2 (Martindale)	100.000
Pilling	scale 1-5, max. 5 - EN ISO 12945-2	5
Colour fastness to light	scale 1-8, max. 8 - EN ISO 105 - B02	6
Colour fastness to rubbing	scale 1-5, max. 5 - EN ISO 105X12 (wet/dry)	4-5
Cleaning	Vacuum cleaning, cleaning with dry foam.	

Thanks to its fabric technical properties prevent gradual deformations. Constantly adapts to any user's positions and also helps the user's back to maintain a regular temperature because of the fabric transpiration. Mesh structure is physically prepared to resist scratches or damages produced by sharp items recovering thus its initial state by extending the end product's life

Subject to changes and colour diferences

## ■ FABRIC MESH "NET" (Finishes)



### STRING - FABRIC MESH

Material	Polyester	100%
Weight	lin. metre aprox. grams	405 gr./lmmllfm.
		270 gr./mq
Width	cm	160
Abrasion resistance	rubs - EN ISO 12947-2 (Martindale)	70.000
Pilling	EN ISO 12945-2	5
Colour fastness to light	scale 1-8, max. 8 - ISO 105 - B02	5
Colour fastness to rubbing	scale 1-5, max. 5 - ISO 105X12 (wet/dry)	5
US ACT	Pass Heavy Duty Upholstery	
Cleaning	dry cleaning 🕑	P-cleaning
	🐨 Shrinkage: max 1,0%	
	🐨 Shrinkage: max 1,5%	
Flammability	EN 1021 -1&2 • BS 5852 - 0&1	
	Will also pass other flammability standards.	
	Flame retardant performance is depende	nt upon the foam
	used and fireproof treatment.	
Subject to changes and colo	our diferences	

## ■ FABRIC MESH "STRING" (Finishes)





30 BLACK

31 WHITE

#### Wood

Care and protection of wood.

**Scratches:** Use a protector that protects surfaces against marks, scratches and Lift objects up whenever possible. The majority of scratches are made by dragging objects across the wood.

Plastic and Rubber: Some plastics contain components that contain soft material.When you put some wooden objects on this which contain some components which may damage the finish, resulting in shades or prints.To avoid this, use flet or leather mats on the table. Do not use mats covered in plastic.Avoid leaving plastic folders or files on the table preventing the wood "breathing".

**Light effects:** As with leather, wood changes over time. Light - affects wood which causes a change in colour. Each species of wood changes. Some adopt a warm tone while others become darker or lighter.

Move objects and accessories frequently so as to avoid shadows on the wooden surface.

**Reflection:** Trees contain a "vascular" system of fibres which carry the sap to every corner. These fibres cause the wood to reflect light in different ways, depending on how it is made up. For example, a table and extension, having different fibres will look like different shades. But if you walk around, you will notice how the light changes on work surfaces and the effects of brightness and velvet on the wood.

Avoid temperatures and extreme humidity.

Clean with any Commercial products suitable for cleaning and maintenance for treated wood surfaces, wax basis, aliphatic hydrocarbon or seed oil surfactant.

Always wipe the surface in the direction of the grain. Remove stains. Do not use products with silicon.

### Fabrics

Each material has a specific feature, albeit technical or aesthetic.

If the stain has dried, try to remove the excess by hand or by using a brush.

Place a cleaner on the stain and continue with a PH neutral cleaner with a neutral cleaning agent such as soapy water. It is important to rinse with clean water.

Types of stains:

**Oil:** Treat with a solvent or treat with a colour fixing agent.

**Alcohol:** Fresh stains: Treat with a household vinegar and rinse immediately. **Dried Stains:** Treat with a whitening oxidizing agent. **Pen:** Treat with a colour fixing agent.

**Coffee:** Fresh stains: Treat with household vinegar, and rinse immediately. Dried Stains: Treat with a whitening oxidizing agent.

Wax for furniture: Treat with a colour fixing agent.

Chewing gum: Treat with a solvent.

Chocolate: Fresh stains: Treat with soap or liquid soap for hands, rinse immediately or treat with solvent.

Cream: Fresh stains: Treat with soap or liquid soap for hands, rinse immediately.

Grease: Treat with a colour fixing agent.

Lip stick: Treat with a colour fixing agent or treat with a colour fixing agent.

Milk: Fresh stains: Treat with soap or liquid soap for hands, rinse immediately.

Butter: Treat with a colour fixing agent. Fresh stains: Treat with soap or liquid soap for hands, rinse immediately.

Urine: Fresh stains: Treat with soap or liquid soap for hands, rinse immediately.

Blood: Fresh stains: Treat with soap or liquid soap for hands, rinse immediately.

**Tea:** Fresh stains: Treat with household vinegar, and rinse immediately. Dried Stains: Treat with a whitening oxidizing agent. Ink: Treat with a colour fixing agent.

Wine: Fresh stains: Treat with household vinegar, and rinse immediately. Dried Stains: Treat with a whitening oxidizing agent. Fruit juice: Treat the stain with a whitening oxidizing agent or treat with a colour fixing agent.

### Leather

Leather is a natural material, probably the toughest upholstery and requires specific care.

Wipe gently. Use a cream once or twice a year. Do not use shoe polish. Types of stains.

Water: Soak and leave to dry before brushing.
Pen: Alcohol 90%
Coffee: Mix water with a little ammonia.
Grease: Apply a grease solvent spray. Leave to dry. Brush.
Wax stains: Apply a grease solvent spray. Leave to dry. Brush.
Other stains: Consult with a specialist.
Pen: Warm skimmed milk and lemon juice.
Water based felt-tips: Water and if neccessary a little bit of lemon.
Permanent Ink: Cannot be removed

It is recommended that you clean the upholstery every two weeks, to prevent an accumulation of dirt ( for example skin particles that can be inserted into the fabric.)

Visitors chairs need less cleaning than work chairs which are used daily.

It is essential to use a soft fibre brush on a vacuum to prevent damage to the fabric surface.

The dried in dirt on the surface will disappear after a thorough cleaning.

As for wet marks and stains that will not disappear after cleaning with a vacuum, we suggest the following solutions:

Mix water with a PH neutral cleaner. The temperature of the water must be between 25 and 35 degrees. A running liquid may also be used but don't overdose.

Clean the stains several times, using a soft fabric until they are no longer perceptible. It is essential not to use too much water and avoid soaking the foam, which could damage the chair.

After 3 washes, rinse with water.

Press with a dry fabric against the other fabric to remove the moisture as much as possible.

If the result is not completely satisfactory, repeat the process.