

# FULL PACKAGE FOR SEAMLESS GARMENT

LUBRICATION - DYEING - FINISHING - SPECIAL EFFECTS



**AVCOchem<sup>®</sup>**  
[www.avcochem.com.vn](http://www.avcochem.com.vn)

# LUBRICATION KNITTING OILS

## KLUBER - MADOL OILs

### Advantages

- ✓ Lubrication and wear protection
- ✓ Compatibility of materials (synthetic fibers) sealing materials, plastics, metal parts)
- ✓ Scourability ensure even and deep dyeing
- ✓ Reliable wetting of the friction points
- ✓ Keep needle grooves clean
- ✓ Extend the needle life
- ✓ Good oxidation stability
- ✓ Keeping maintenance costs to a minimum.
- ✓ Excellent with Santoni knitting machines



### Properties and Availability

- ✓ Clear transparent
- ✓ Low viscose liquid
- ✓ Available in 1000l; 200; 30l and 4l

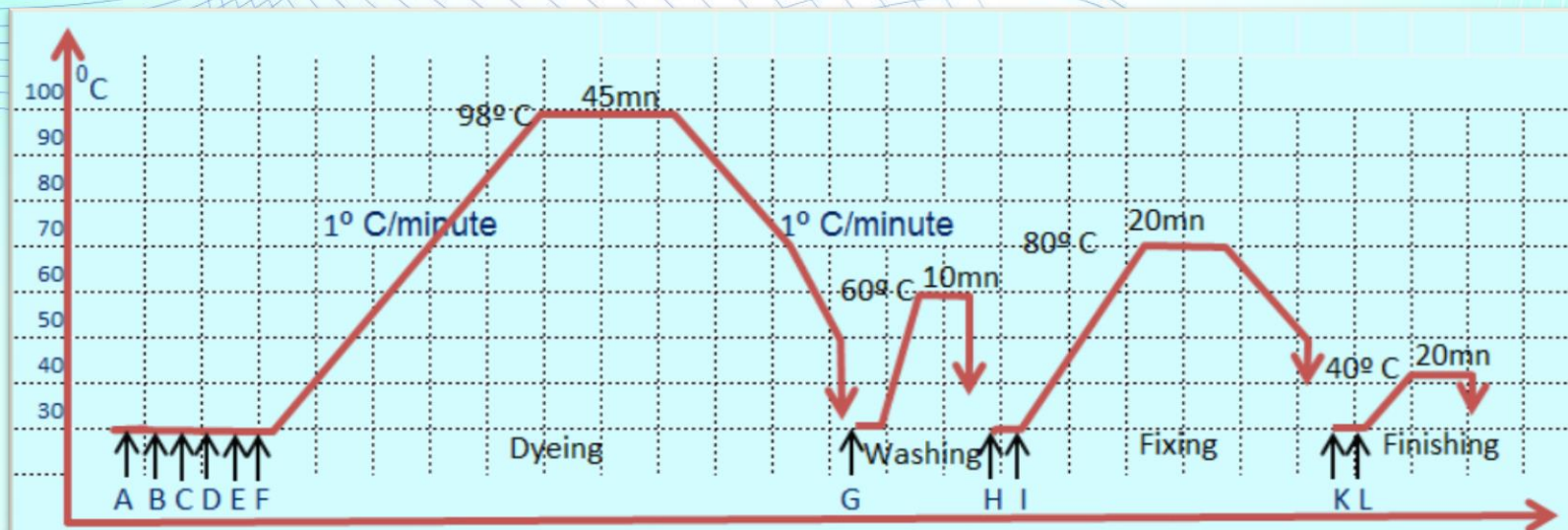


# PRODUCT RECOMMENDATIONS

## AUXILIARIES

Pretreatment	Dyeing	Finishing	Special Treatment
1. Oil Removal: Avco-Biosol 1040	4. Acid Buffer: Avco-Cid LPH CONC	9. Soft & smooth silicone: AVCO-Elastogum RD68	13. Anti-yellowing: AVCO-Gard AY
2. Anti crease: Avco-Tex A25-I	5. Leveling: Avco-Lon NAL 03	10. Hydrophilic silicone: AVCO-Elasil JWH	14. Anti static: AVCO-Stat AHM
3. Antifoam: Avco-Antifoam H50	6. Fixing agent: Avco-Fix N99	11. Hydrophilic softener: AVCO-Naf NY 200	15. Wicking agent: AVCO-Wick DMM
	7. Washing: Avco-Ron RWA	12. Water repellent finish: AVCO-Phob 6410	
	8. Optical Brightener: Synto-Lux CLB NEW		

# PROCESS CHART



Apply chemicals		
Position	Name	Recipe
A	AVCO-BIOSOL 1040	0.5-4.0 g/l
B	AVCO-TEX A25 I	0.5-2.0 g/l
C	AVCO-ANTIFOAM H50	0.2-1.0 g/l
D	AVCO-LON NAL 03	0.5-3.0 g/l
E	AVCO-CID LPH CONC	0.5-2.0 g/l
F	Acid Dyestuff	X%

Apply chemicals		
Position	Name	Recipe
G	AVCO-RON RWA	0.5-1 g/l
H	AVCO-FIX N99	1.0-5.0 %
I	CH3COOH	Adjust PH=3-4
K	AVCO-RD68/JWH/NY200/6410	0.5-3.0 g/l
L	CH3COOH	Adjust PH=5-6

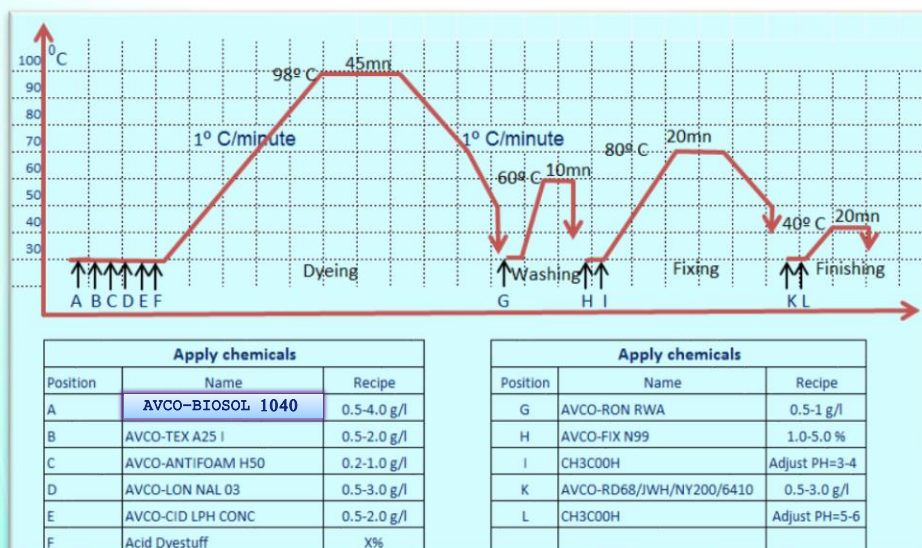


# LOW FOAMING OIL REMOVAL

## AVCO-BIOSOL 1040

### Advantages

- ✓ Excellent dispersion and emulsion properties
- ✓ Oil removing effect, can be used in a wide range of pH
- ✓ Nonionic, low foaming surfactant, suitable for high speed machine
- ✓ Used in neutral medium, mild alkali or mild acid solutions
- ✓ Environment friendly, regarded as a "GREEN" product



### Properties

- ✓ Blends of surfactants
- ✓ Clear, yellow liquid
- ✓ Non-ionic
- ✓ Miscible with water at any ratio
- ✓ Compatible with hard water, mild acids, mild alkalis

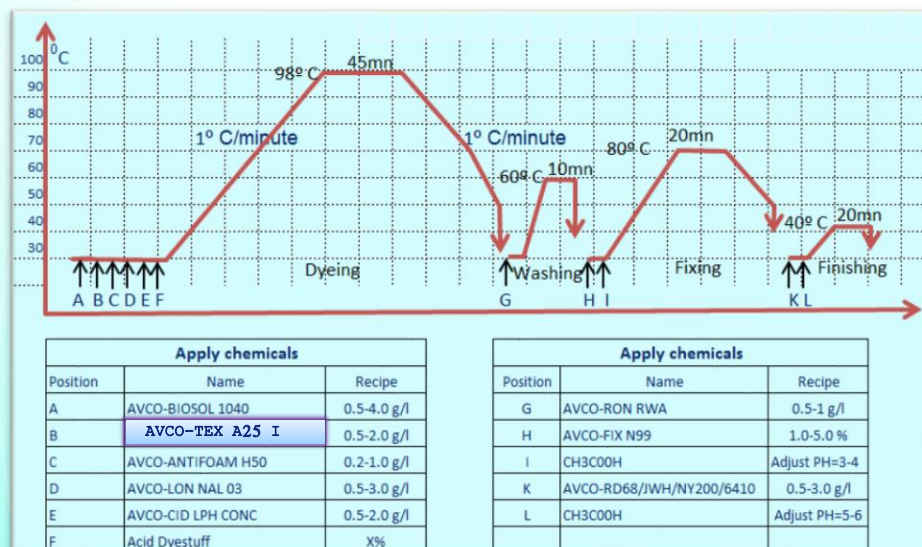


# ANTI-CREASE AGENT FOR SYNTHETICS FABRICS

## AVCO-TEX A25-I

### Advantages

- ✓ Overcome the problems of folds and creases marks
- ✓ Recommended for dyeing in low ratio
- ✓ Recommended for processing elastane (Lycra), microfibers
- ✓ Improves absorbency
- ✓ Suitable for a wide pH range
- ✓ Can be used with hard water.



### Properties

- ✓ Polyamide derivative in aqueous solution
- ✓ Clear, colorless to slight yellowish liquid
- ✓ Non-ionic
- ✓ Miscible with water at any ratio
- ✓ Compatible with all types of chemicals normally used in preparation and dyeing of synthetic fabrics

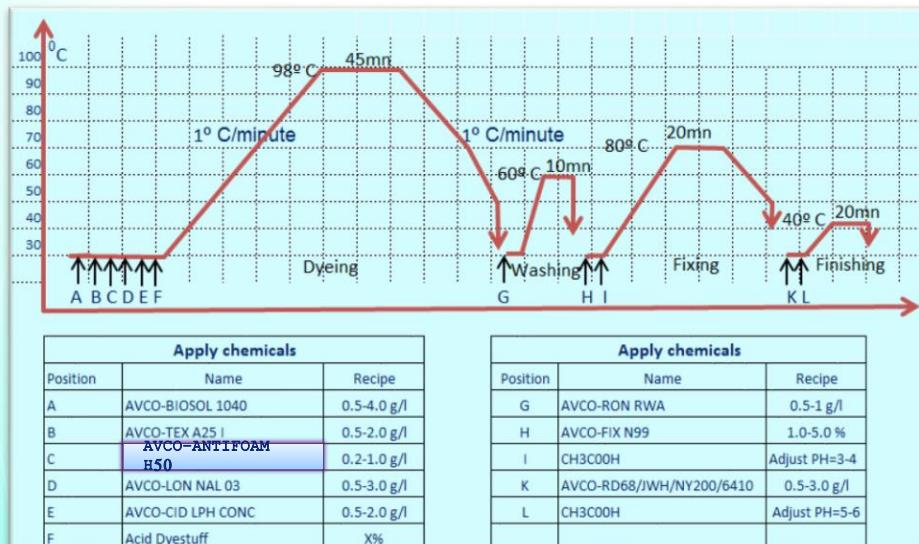


# SILICONE ANTI-FOAMING AND DE-FOAMING AGENT

## AVCO-ANTIFOAM H50

### Advantages

- ✓ Used in most aqueous textile operations
- ✓ Very efficient and economic anti-foam
- ✓ Good stability to high temperatures
- ✓ Good compatibility with various chemicals with a long-lasting effect
- ✓ Can be dosed very easily into the aqueous phase
- ✓ Spreading in the aqueous medium is very quick
- ✓ Anti-foaming effect shows up immediately



### Properties

- ✓ Oil / water emulsion of silicone polymer
- ✓ Milky white low viscosity liquid
- ✓ Mainly Non-ionic
- ✓ Dispersible in water
- ✓ Stable in aqueous processes, not stable in extreme PH range

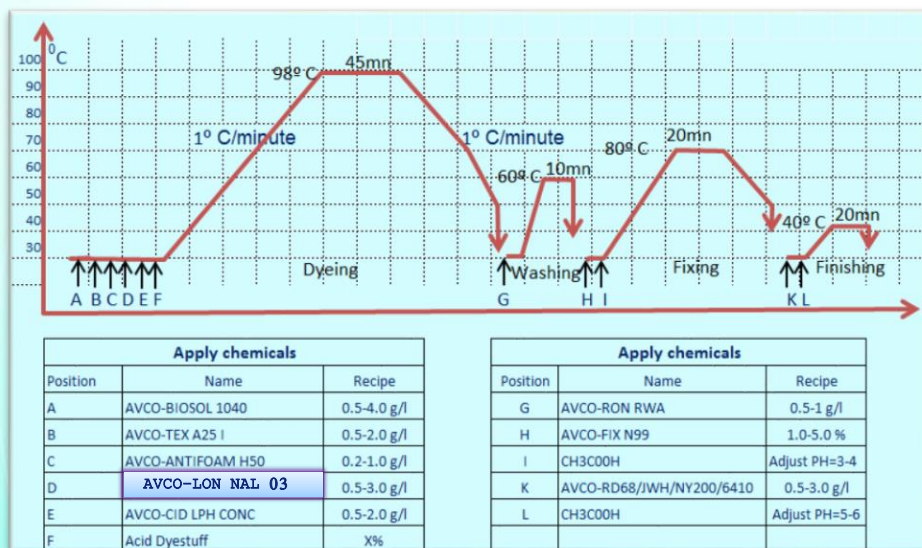


# LEVELING AGENT

## AVCO-LON NAL 03

### Advantages

- ✓ Moderate affinity to the cationic dye-sites on the polyamide fibres and to the anionic anchors on the acid dyestuff molecules.
- ✓ Excellent migrating capacity and good dye yield
- ✓ Recommend for dyeing of fibres which have severe affinity differences
- ✓ Suitable for dyeing acid dyes, metal complex dyes
- ✓ Suitable for dyeing at high temperature
- ✓ Not impair the fastness



### Properties

- ✓ Aqueous compound of poly-ethoxylated fatty amines and sulphonated surfactants
- ✓ Slightly brown liquid
- ✓ Non-ionic/anionic
- ✓ Soluble in water at any ratios
- ✓ Stability in normal conditions

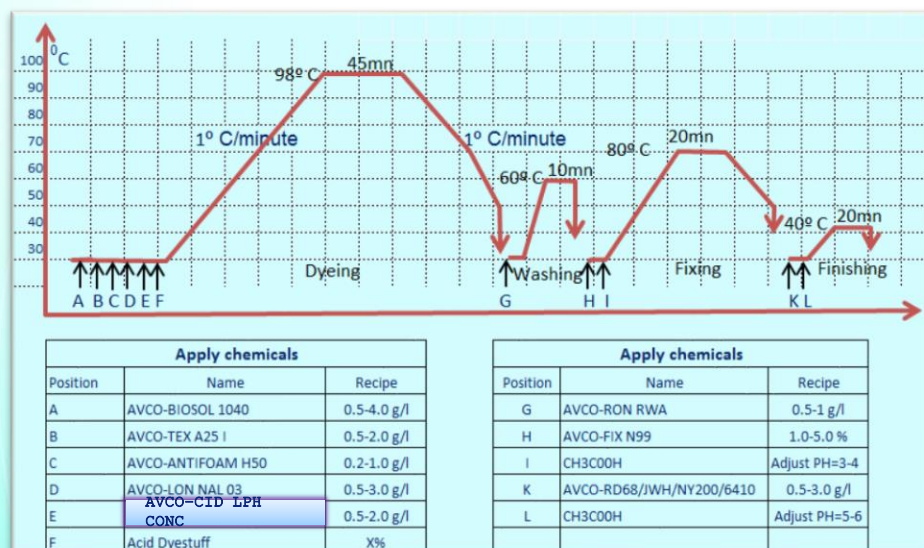


# ACID DONOR AND PH REGULATOR

## AVCO-CID LPH CONC

### Advantages

- ✓ Evenly and slowly hydrolyzes in hot aqueous solution to produce an organic acid
- ✓ Produced is lowering the PH of the solution down to 4.0-5.5
- ✓ Dissociation is slow in cold solutions and increases when the temperature is raised
- ✓ Ensures more level dyeing
- ✓ Not influence to fastness properties



### Properties

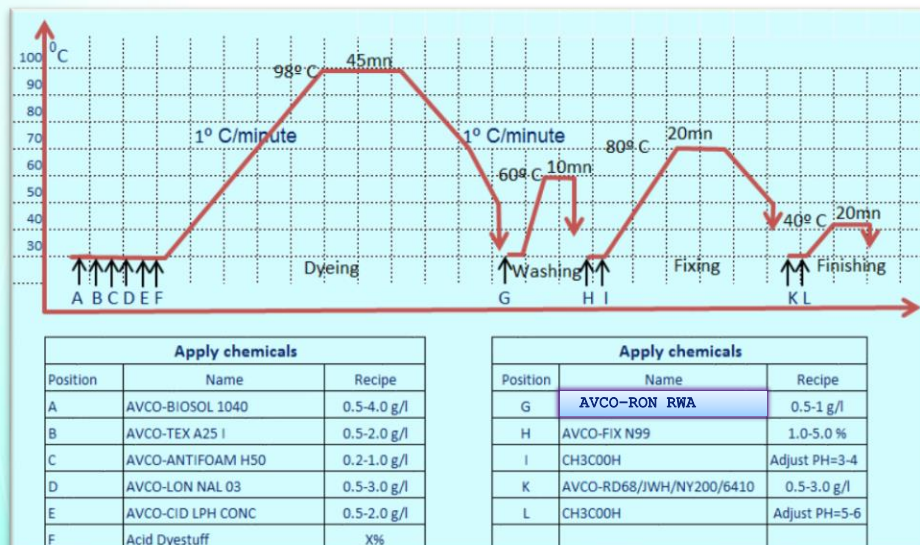
- ✓ Blend of organic esters
- ✓ Yellowish clear liquid
- ✓ Miscible with cold water
- ✓ Non-ionic
- ✓ Not compatible with strong alkalis

# WASHING-OFF AGENT

## AVCO-RON RWA

### Advantages

- ✓ Improve rubbing fastness and wash fastness
- ✓ Excellent washing-off properties
- ✓ Anti-back staining
- ✓ Sequestering and dispersing calcium and magnesium
- ✓ No influence on dyestuff containing meta complex
- ✓ Non-foaming at all, can use in all high speed machine



### Properties

- ✓ Organic polymers in aqueous solution
- ✓ Colorless to pale yellow liquid
- ✓ Non-ionic
- ✓ Soluble in water at any ratios
- ✓ Compatible with hard water, alkalis and mild acids

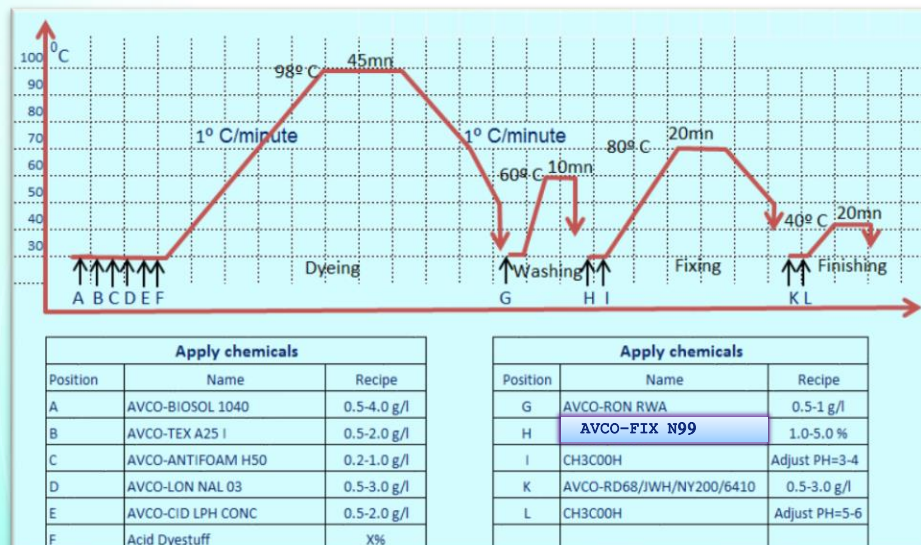


# FIXING AGENT

## AVCO-FIX N99

### Advantages

- ✓ Improve wash-fastness of polyamide fibres dyed with acid dyestuffs
- ✓ As a resist agent in dyeing polyamide blends
- ✓ Minimum effect on shade and high fastness of dyed fibres
- ✓ No effect on treated fabrics handle
- ✓ Suitable for application in high-speed machines



### Properties

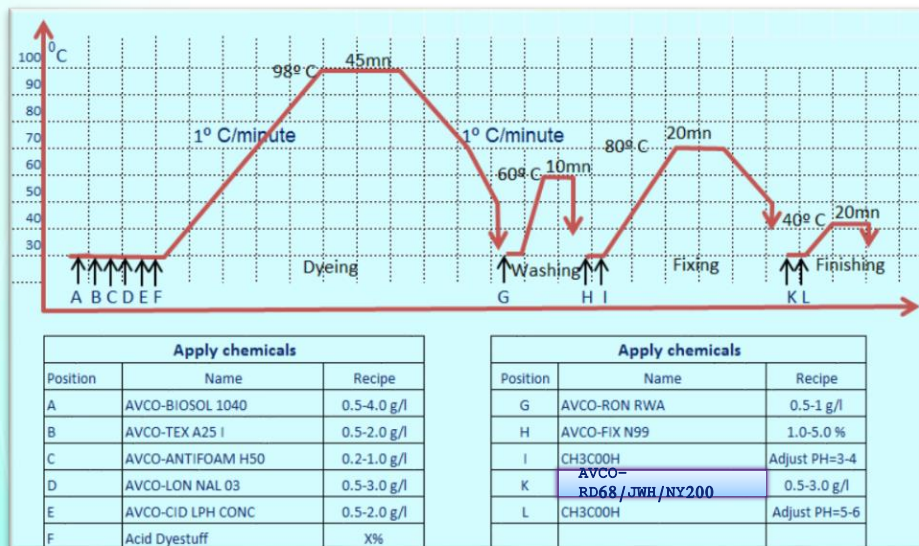
- ✓ Aqueous solution of synthetic resin
- ✓ Brown clear liquid
- ✓ Anionic
- ✓ Miscible with water at any ratios
- ✓ Compatible with no-ionic and anionic
- ✓ Incompatible with cation, acids and alkalis

# ELASTOMERIC FINISHING

## AVCO-ELASTOGUM RD 68

### Advantages

- ✓ Connecting three-dimensional into textile fabrics
- ✓ Designed to provide high grade softness
- ✓ Create stretchy finish and bounciness to textile fabrics.
- ✓ High elastomeric property finishing of textile
- ✓ Lowers pilling and abrasion of textile fabrics
- ✓ Improves the handle feel for "wash and wear" resins finishing
- ✓ Improves sew-ability of the treated fabrics



### Properties

- ✓ Aqueous emulsion of modified polymer
- ✓ Opaque colorless liquid
- ✓ Non-ionic, becomes cationic in acidic medium
- ✓ Miscible with water at any ratios
- ✓ Incompatible with anion product

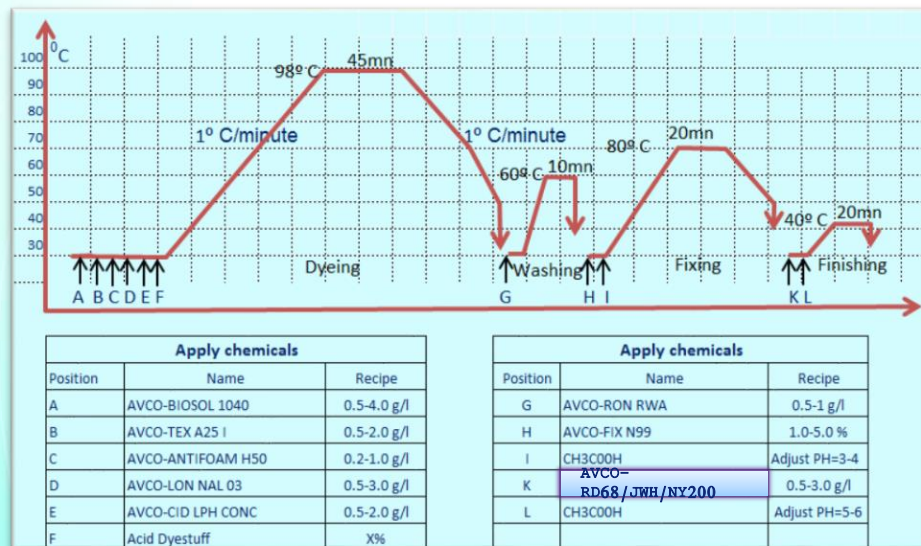


# HYDROPHILIC SILICONE

## AVCO-ELASIL JWH NY200

### Advantages

- ✓ Giving special smooth and soft handle
- ✓ Good hydrophilic and soil release properties
- ✓ Non yellowing on white yarns and fabrics
- ✓ Improves dimensional stability of knits
- ✓ Sew-ability of treated fabrics, wash and wear proper
- ✓ Used for all types of fibres
- ✓ Can be used together with nonionic and cationic hydrophilic softeners



### Properties

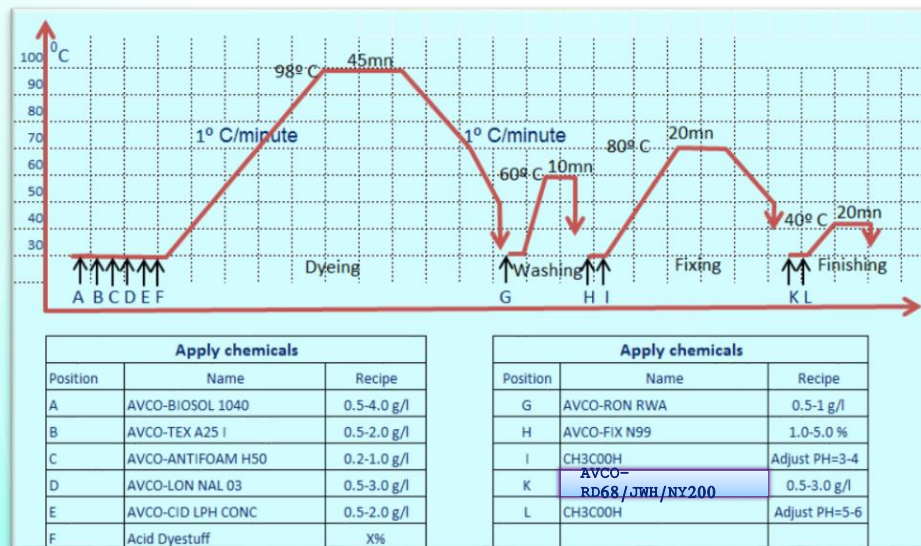
- ✓ Micro-emulsion of silicone polymers
- ✓ Almost clear, colorless liquid
- ✓ Slightly cation
- ✓ Miscible with water at any ratios
- ✓ Compatible with non-ionic, cationic product

# COMFORT FINISHING

## AVCO-NAF NY 200

### Advantages

- ✓ Durable comfort-finishing, soil-release
- ✓ Antistatic agent for polyester, nylon and its blends
- ✓ Excellent hydrophilic, wicking properties
- ✓ Render polyester, nylon fabric fluffy and soft hand-feel
- ✓ The treated fabrics will become comfortable to wear
- ✓ No effect on the whiteness and color shade of the treated fabrics.



### Properties

- ✓ Binary polymer of polyester with poly-ether
- ✓ Yellow brown liquid
- ✓ Non-ionic
- ✓ Compatible with most other agent used in dyeing and finishing

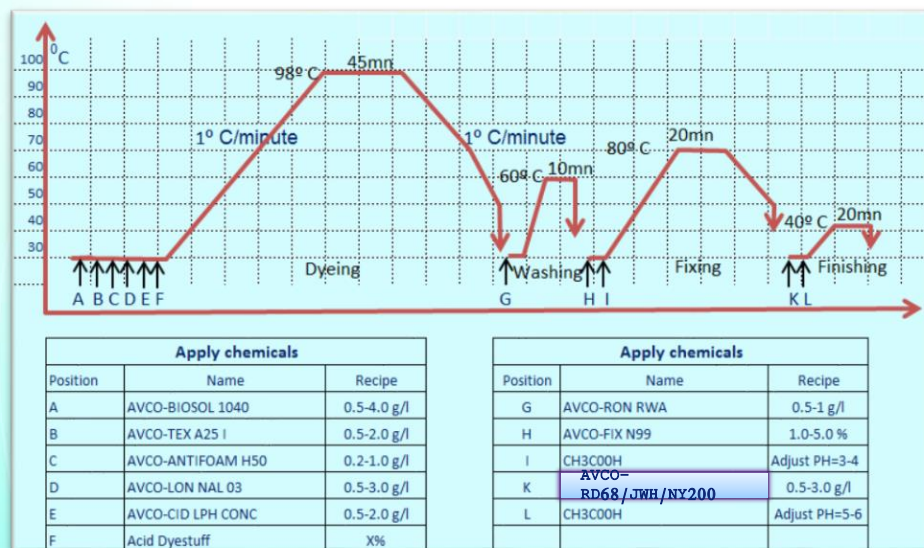


# WATER REPELLENT FINISHING

## AVCO-PHOB 6410

### Advantages

- ✓ Free PFOA and excellent water and oil repellent
- ✓ Good dry soil removal
- ✓ Good wash and dry-cleaning fastness
- ✓ Good breathability
- ✓ No catalyst addition is needed



### Properties

- ✓ Aqueous emulsion of fluorocarbon Co-polymer (C6)
- ✓ White emulsion
- ✓ Amphoteric
- ✓ Miscible with water at any ratio
- ✓ Can be used in neutral and acidic finishing bath

# PHENOLIC AND NITROGEN OXIDE YELLOWING INHIBITOR

## AVCO-GARD AY

### Advantages

- ✓ Prevent phenolic and nitrogen oxide yellowing during handling and storage of the finished articles
- ✓ Replaces traditional acidic after treatment processes
- ✓ Has hydrophilic properties
- ✓ Suitable for application by exhaust and by continuous processes
- ✓ Can be applied with non-ionic and anionic products
- ✓ Can be applied in one-step dyeing and finishing process of polyamide

### Properties

- ✓ Aqueous preparation of alkyl sulfonate
- ✓ Clear yellow, slightly viscosity
- ✓ Anionic
- ✓ Soluble in water
- ✓ Can be applied with non-ionic and anionic product



# ANTI-STATIC AGENT

## AVCO-STAT AHM

### Advantages

- ✓ Excellent anti-static
- ✓ Wash resistant anti-static finish without hot curing.
- ✓ Not impair the softness and smoothness of treated fibers.
- ✓ Suitable for co-application with hydrophilic finishing agents.
- ✓ Compatible with mild acids.
- ✓ Can be applied by padding, exhaust and dipping processes.

### Properties

- ✓ Aqueous compound of hydrophilic synthetic polymers
- ✓ Light yellowish, clear, slightly viscous liquid
- ✓ Non-ionic
- ✓ Miscible with water at any ratios
- ✓ Compatibility with anion product
- ✓ Can be used together with non-anion, cation

# PU - HYDROPHILIC AND WICKING

## AVCO-WICK DMM

### Advantages

- ✔ Permanent hydrophilic properties to synthetic fabrics
- ✔ The finish is resistant to mild washing
- ✔ Impart wear comfort and quick dry properties
- ✔ Imparts typical soft handle to the treated fabrics
- ✔ Non-Yellowing product, the finish can be over dyed easily
- ✔ Imparts anti-static properties to the treated fabrics
- ✔ Enables easy and smooth handling of fabrics during making up and sewing processes

### Properties and Availability

- ✔ Aqueous dispersion of hydrophilic polyurethane
- ✔ Colorless to light yellowish, clear to slightly turbid liquid
- ✔ Non-ionic
- ✔ Soluble in water at any ratios
- ✔ Compatibility with anion product
- ✔ Can used together with non-anion, cation



# OPTICAL BRIGHTENING

## AVCO-LUX CLB

### Advantages

- ✓ Have reddish to bluish shade
- ✓ High affinity towards polyamide fibers
- ✓ Stability in most bleaching bath
- ✓ Very good fastness properties
- ✓ Good fastness to chlorinated water

### Properties and Availability

- ✓ Stilbene derivative in aqueous solution
- ✓ Clear, dark blue liquid with fluorescence hue
- ✓ Anionic
- ✓ Soluble in water at any ratios
- ✓ Not stable to hard water and strong acid medium
- ✓ Not compatible with cationic, heavy metal and strong acids

# SPECIAL EFFECTS

## NYLOMIX DYES FOR WASH-OUT EFFECTS

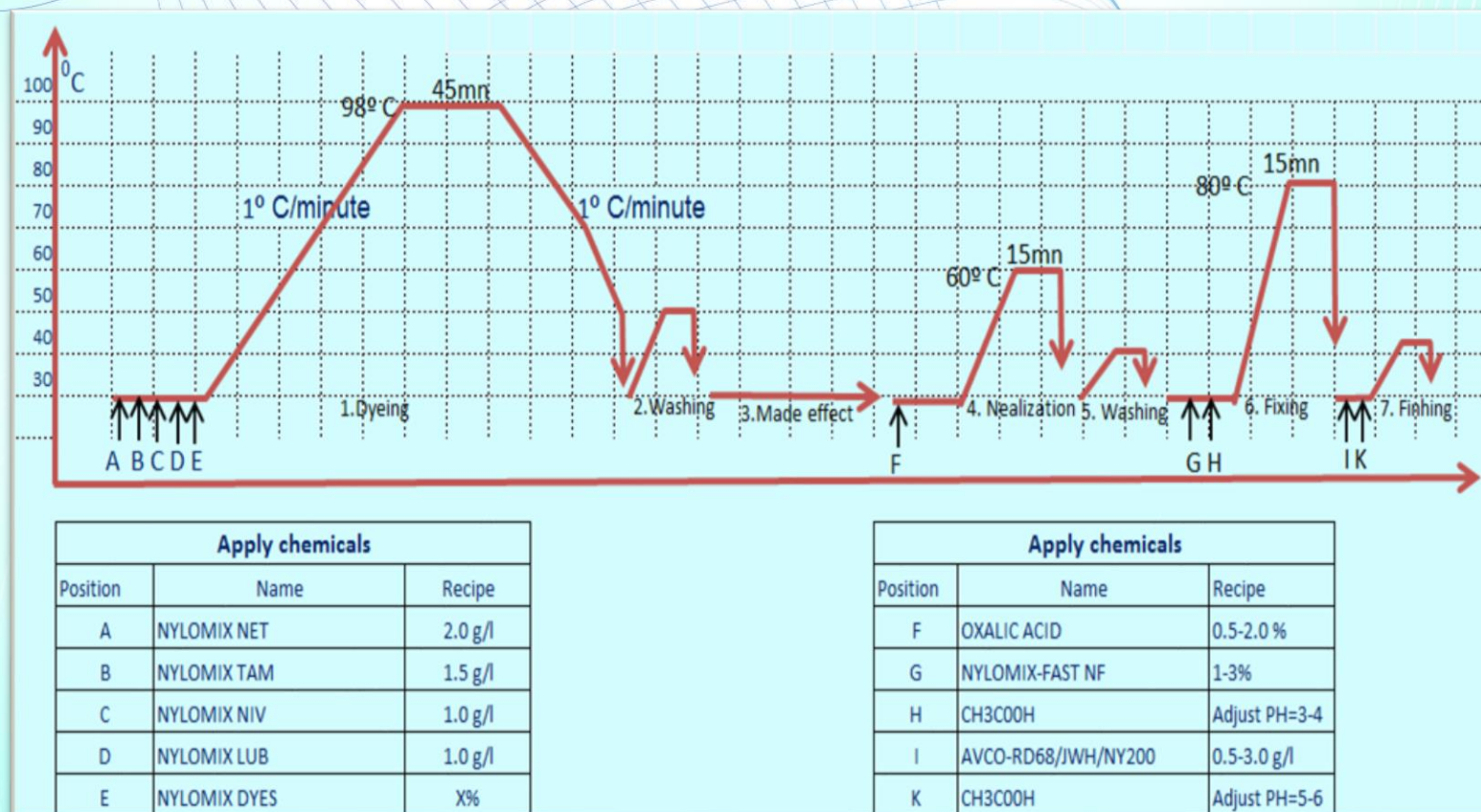
DESCRIPTION	DEMONSTRATION
We offer the full range of dischargable dyestuff on nylon material with our owned brand name Nylonmixaaa	
Full range of shades	
High fastnesses	
Complied to most of sustainability requirements	
Complete dyes and chemicals package to produce different wash-out effects	



# NYLOMIX DYEING AND SPECIAL EFFECTS

## WASH-OUT EFFECTS

### FLOW CHART



# SPECIAL EFFECTS

## WASH-OUT EFFECTS

### OPERATORS' SKILL MATTERS

- ✔ Choose Sponge/balls with good absorbency
- ✔ Select suitable sizes and softness of sponge/balls to create desired effects and not harmful to garment
- ✔ Dilute Avco-Magic Liq to ratio as level of wash-out effect required
- ✔ Control Sponge/balls absorbent rate of diluted Avco-Magic Liq solution
- ✔ Control top-up spray of diluted Avco-Magic Liq on to the Sponge/balls between batches
- ✔ Control running cycle to ensure reproducibility

