

We Welcome YOU all !



Symposium on...

Textile Finishes : New Vista !

Hosted By



SESSION 2

Wednesday , 10th June 2020
11:30 AM to 12:30 PM (IST)



Panel Members

Organisers

Mr. Puneet Arora (CEO - Textiles Global)
Mr. Shantanu Dey (VP - Export & Brands)
Ms. Madhu Malik (AMM - Brands)

Presenters

Dr. Ashok Athalye (Senior Professor - ICT)
Ms. Manjiri Paranjape (VP - R&D)
Mr. Dhananjay Bauchkar (Technical Specialist)



Requesting You All To Mute Your Mic



**We Will Have Q & A Session At The End Of The Presentation ,
You Can Type Your Questions In The Chat Box**

Flashback Session 1... Cleaning Is In Our DNA...

Preparatory

- ✓ Textiles
- ✓ Processing Machines

Premises

- ✓ Open Spaces
- ✓ Office Space
- ✓ All Surfaces

Personnel

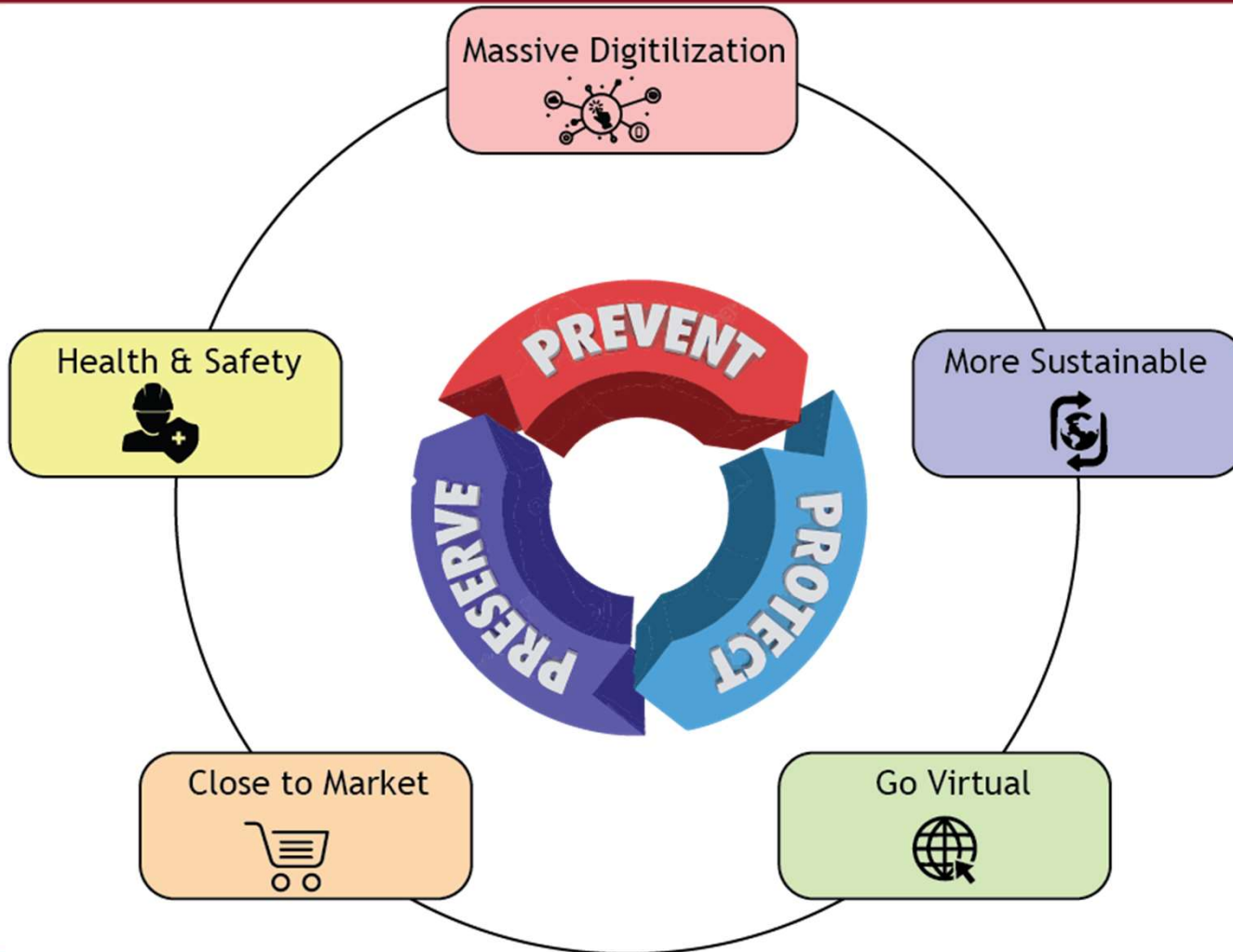
- ✓ Hand wash
- ✓ Sanitizers

Perishables

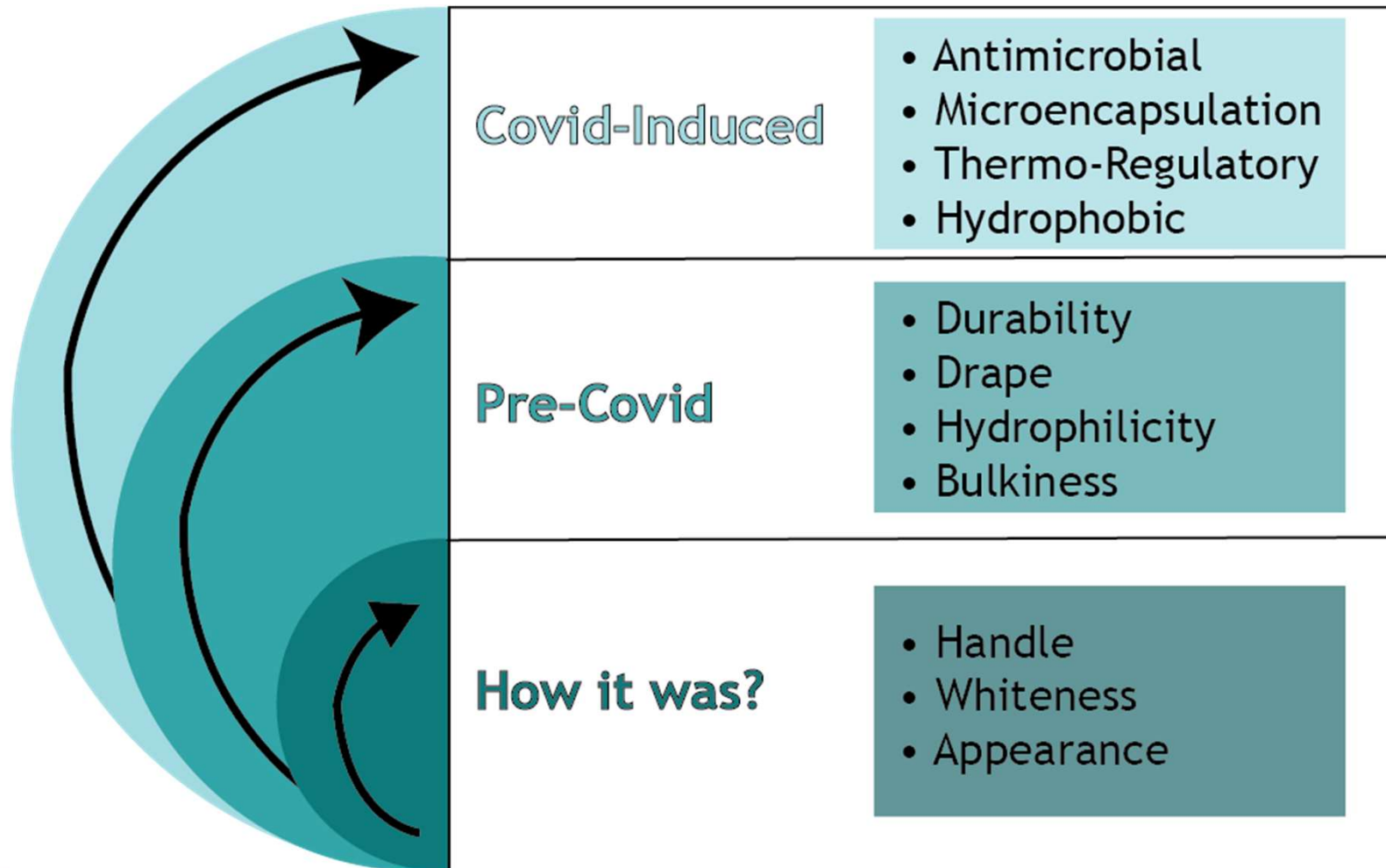
- ✓ Fruits
- ✓ Vegetables



Textile Industry 2020 & Beyond !



Future of Textile Finishing !



Emerging Trends In Textiles

Work Wear

- PPE
- Uniform

Comfort Clothing

- Athleisure
- Multifunctional Clothes
- Essentials



Medical

- Masks
- Gowns/Aprons

Home Textiles

- Upholstery
- Curtains

Shift in Textile/Apparel Manufacturing

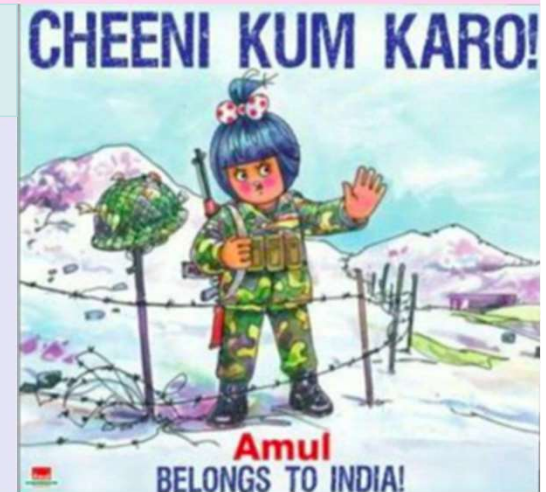
Exit the Dragon?



- ❖ Formal Suit Manufacturing plant is making PPE!

Go VOCAL for LOCAL !!

- ❖ Textile Mills producing PPE & Mask fabric



Textile Finishes : New Vista !

Aesthetic

- ✓ Vitamin E Finish
- ✓ Aloe Vera Finish
- ✓ Fragma Finish

Protective

- ✓ UV Protection Finish
- ✓ Antistatic Finish
- ✓ Hydrophobic Finish



Health

- ✓ Antimicrobial Finish
- ✓ Mosquito Repellent Finish
- ✓ Antifungal Finish

Comfort

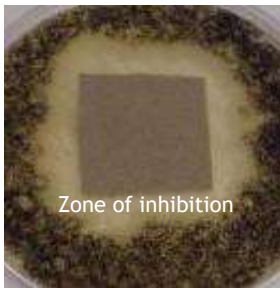
- ✓ Thermo- Regulation
- ✓ Moisture Management

Antimicrobial Finishes In Textiles

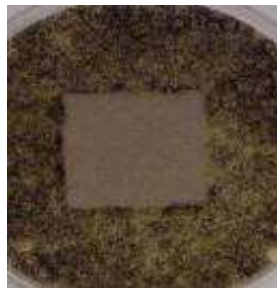


Antimicrobial Finishes

Types Of Antimicrobials



Leaching



Non Leaching

Based On

Silver

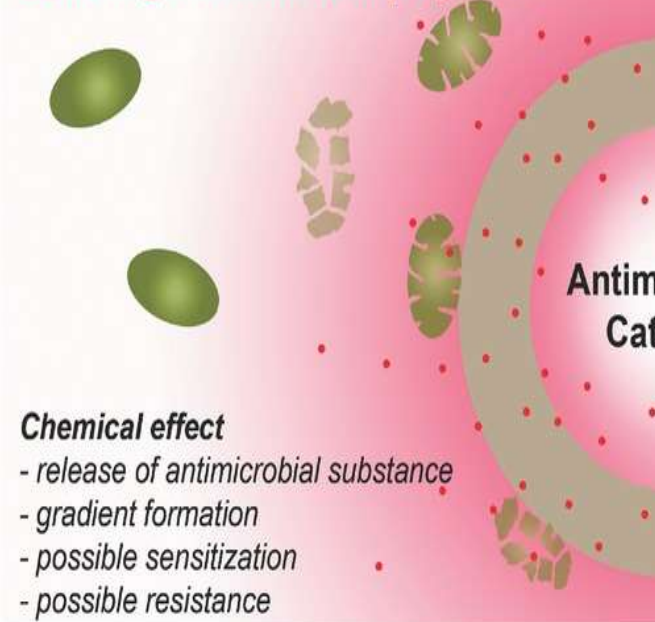
Chloroxyphenol

Zinc Pyrithione

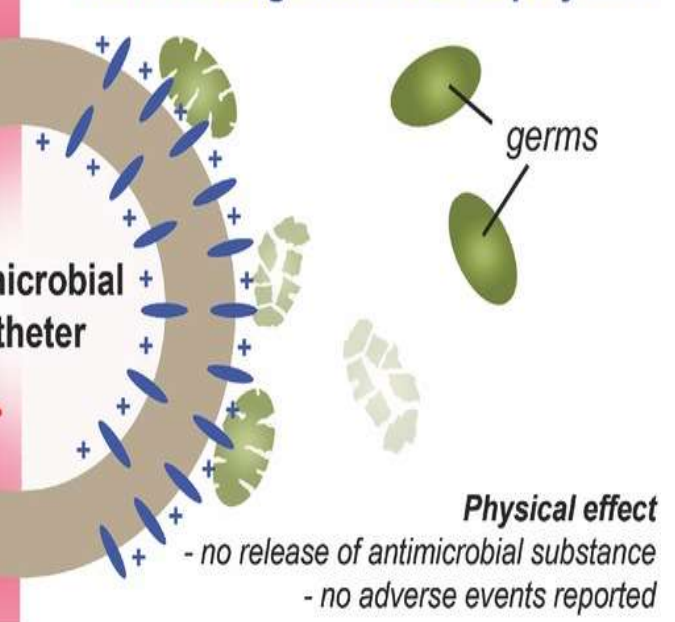
PHMB

Silane

Leaching antimicrobial polymers



Non-leaching antimicrobial polymers

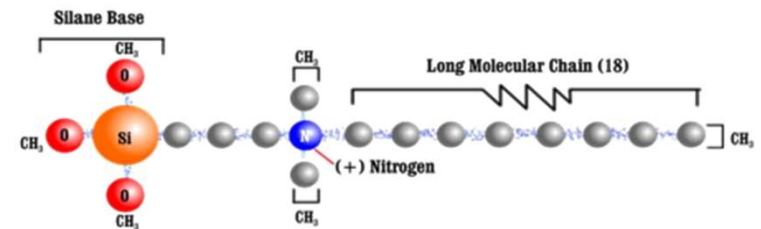


Rossari's Antimicrobial Technology

- ✓ Organo Silane Based Products
- ✓ **Non Leaching Technology**
- ✓ **Will Not Cause Microbial Adaptation**
- ✓ Reduces The Risk Of Cross Contamination And The Spread Of Pathogens
- ✓ Treated Surfaces Become Inhibitory For The Development Of Microbial Reservoirs
- ✓ The Destruction Of The Organisms, Airborne Or Otherwise, On Contact With Treated Surfaces



Organo Silane

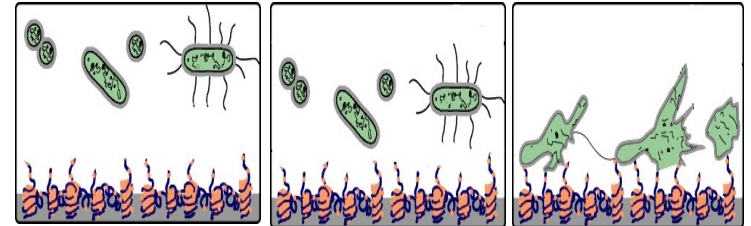
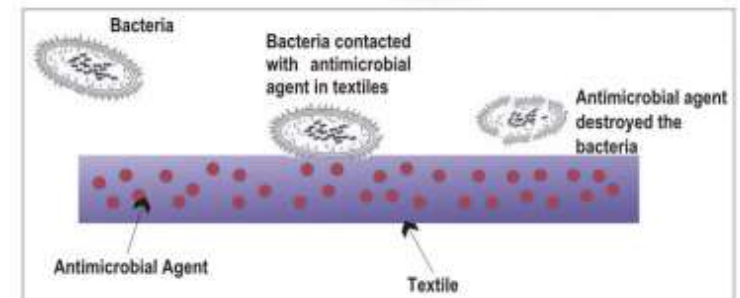


Antimicrobials : Fabshield AEM Series - 5700 & 5772/5 Liquid

Key Features

- Safe To Use, Non-Leaching Chemistry
- Durable Throughout The Life Of The Product
- Suitable For All Natural And Synthetic Textiles - Knits, Wovens & Non-Wovens
- Can Be Applied By Spray, Exhaust And Padding
- Moderate Water Repellency

Mechanism of action



Approved Test Reports From Independent Labs



Test Organisms Used:

1. Staphylococcus aureus ATCC 6538 (1.90×10^5 CFU/ ml)
2. Klebsiella pneumoniae ATCC 4352 (2.00×10^5 CFU/ ml)

Quantity of Sample:

1 gram

Results:

Socks sample pieces in contact with bacterial suspension on wrist arm shaker for 24 hr shows –

Sample Identification	Test Organism	No. of Bacteria per sample (CFU/ ml)		Percentage Reduction of Bacteria (R)
		Inoculated Sample at 0 hrs. (B)	Treated Sample at 24 hrs.(A)	
Untreated socks	Staph. aureus	1.87×10^5	1.77×10^5	5.34
	K. pneumoniae	2.13×10^5	2.53×10^5	0.00
Fabshield AEM 5700 – 0.75%; Roswik 14 H – 2.0%; Snocool SRB – 0.4%; Protelan LGA – 4.0% - Treated socks	Staph. aureus	1.84×10^5	1.40×10^2	99.92
	K. pneumoniae	2.14×10^5	1.26×10^3	99.41
-Treated after 30 washes	Staph. aureus	1.86×10^5	2.00×10^3	98.92
	K. pneumoniae	2.08×10^5	9.90×10^3	95.24

ASTM 2149 Test Report From BTS Lab

RESULTS

REQ

EVALUATION OF ANTIMICROBIAL ACTIVITY OF TEXTILES ■ AATCC 100:2012

As Received

Gram Negative Bacteria : Klebsiella Pneumoniae (ATCC 4352)
 Gram Positive Bacteria : Staphylococcus aureus (AATCC 6538)
 Test specimen : 4.8 cm in Dia
 Exposure Time : 24 Hr
 Neutralising Solution : Neutralising Fluid
 Media : Nutrient Agar
 Incubation : 37 deg C for 24hr
 % Reduction of k.pneumoniae: 99.9
 % Reduction of S.aureus : 99.9

90% Reduction

Note:The above test has been subcontracted to a SGS group laboratory.

After 20 wash

Gram Negative Bacteria : Klebsiella Pneumoniae (ATCC 4352)
 Gram Positive Bacteria : Staphylococcus aureus (AATCC 6538)
 Test specimen : 4.8 cm in Dia
 Exposure Time : 24 Hr
 Neutralising Solution : Neutralising Fluid
 Media : Nutrient Agar
 Incubation : 37 deg C for 24hr
 % Reduction of k.pneumoniae:98.7
 % Reduction of S.aureus : 97.5

90% Reduction

Note:The above test has been subcontracted to a SGS group laboratory.

AATCC 100 Test Report From SGS Lab

Approved Test Reports From Independent Labs



检验结果 Test Results

20191VF04161

共 5 页 第 5 页

序号 No.	样品 编号 Sample	检验项目 Test Item		技术要求 Requirement	检验结果 Result	单项 评价 Rating	备注 Remark
1	A1	抗菌性 Anti Bacterial Activity (FZ/T 73023)	After Wash (After 10 Washes)	≥99 % MIN 99 %	> 99 %	合格 Pass	金黄色葡萄 球菌 Staphylococ cus aureus 分包项目 Subcontract item.
2	A2	抗菌性 Anti Bacterial Activity (FZ/T 73023)	After Wash (After 10 Washes)	≥99 % MIN 99 %	> 99 %	合格 Pass	金黄色葡萄 球菌 Staphylococ cus aureus 分包项目 Subcontract item.

Name of Test:

Assessment of anti-microbial activity by AATCC 147 - 2016

Test Inoculum:

1. Staphylococcus aureus ATCC 6538
2. Klebsiella pneumoniae ATCC 4352

Results:

Sample Identification	Test Organism	Antibacterial activity		Conclusion	
		Zone of Inhibition	Growth under specimen	No antibacterial activity	FAILS
Unfinished fabric	Staph. aureus	No zone	Growth	Bacteriostatic antibacterial activity	PASSES
	K. pneumoniae	No zone	Growth		
Option A	Staph. aureus	No zone	No Growth	Bacteriostatic antibacterial activity	PASSES
	K. pneumoniae	No zone	No Growth		
Option B	Staph. aureus	No zone	No Growth	Bacteriostatic antibacterial activity	PASSES
	K. pneumoniae	No zone	No Growth		

FZ/T73023 China Std., From DTC Lab In China

AATCC 147 Test Report From BTS Lab

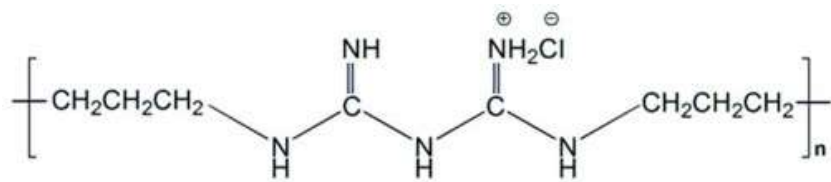
Comparative Study For Commonly Used Antimicrobial Technology

Sr. No	Parameters	Criteria	Zinc Based	Nano Silver Based	Silver Polymer Based	Rossari's Silane Based	Comments
A	Consumer Safety	Mode Of Action	Leaching	Leaching	Non Leaching	Non Leaching	Non Leaching Is Safer
		Environmental Safety	Not Safe	Moderately Safe	Moderately Safe	Safe	Zinc Not Safe For Aquatic Life, Silver Is Leaching
		Delivery System	Based On Encapsulation & Release	Based On Encapsulation & Release	Based On Encapsulation & Release	Silane Monomers - Better Affinity	
		Durability	20 Washes	20 Washes	20 Washes	30-40 Washes	Silane Forms A Covalent Bond, hence Permanent
		Effectivity	More Effective For Gram + Bacteria	More Effective For Gram + Bacteria	More Effective For Gram + Bacteria	Effective On Both Gram + Gram- Bacteria	Silane Has Wider Spectrum
B	Ease Of Application	Ionic Nature	Anionic	Cationic	Cationic	Cationic	Anionic Not Compatible With Finishing Products
		Compatibility With Finishing Bath	Poor	Good	Good	Good	
		Substrate Specific	No	No	No	No	
		Affinity To Textile	Average	Average	Average	Very Good	Metal Ions Are Difficult To Load, Lot Of Wastage & Challenge In Stability
		Dosage	10-20 Gpl	10-20 Gpl	10-20 Gpl	5-20 Gpl	
		No Change In The Textile Properties	Yellowing In Lights & Pastels	No Effect	No Effect	No Effect	

Antifungal Finish : Fabshield MF COT Liquid

Key Features

- ✓ Suitable For Cotton & Cotton Rich Blends
- ✓ Durable
- ✓ **Inhibits Fungus Growth**
- ✓ No Odor & Maintains Freshness
- ✓ Applicable By Exhaust, Spray, Padding Methods



Mechanism

- Based On PHMB - Poly(Hexamethylene Biguanide) Chemistry
- PHMB Has Positively Charged Groups Which Are Strongly Attracted To The Negative Charges On Cellulosic Fibres

Fabshield MF COT Liquid - Test Report

Performance Testing

Test Standard: AATCC Test Method 30; ILL 2017



Sample Description	Zone Of Inhibition	Rating	Interpretation
Unfinished Fabric	No Zone	4	Susceptible To Fungus
Finished Fabric	No Zone	0	Resistant To Fungus Attack



Name of Test:
Assessment of Antifungal Activity, Mildew and Rot resistance of textile Materials

Test Standard:
AATCC Test Method 30, III 2017

Test Culture:
Aspergillus niger ATCC 6275

Test specimen Size:
38 mm

Incubation Condition:
7 days in humidity chamber (> 90 % RH) at 28°C

Results:
Visual/ Microscopic Assessment Report

Sample Description	Zone of Inhibition	Rating	Interpretation
Unfinished fabric	No zone	4	Susceptible to Fungus
Recipe 1	No zone	0	Resistant to fungus attack
Recipe 2	No zone	2	Moderately Resistant to fungus attack
Recipe 3	No zone	0	Resistant to fungus attack
Whatman Filter Paper Viability Control		4	

Evaluation Criteria:
For the evaluation of the relative resistance of textile materials, the percentage of surface growth of Aspergillus niger is noted according to the following scheme -

Observation for Visual/ Microscopic Effects:	Rating
Growth on specimen	
No Growth	0
Trace of Growth (1 to 10 %)	1
Light Growth (10 to 30 %)	2
Medium Growth (30 to 60 %)	3
Heavy Growth (60% to complete coverage)	4



For BIOTECH TESTING SERVICES

Shilpa U. Nair
Dr Shilpa U. Nair
Quality Manager
(Authorized Signatory)

2000654/1 - 4
Page 2 of 2

* Samples are not drawn by the laboratory. * Result relate only to the samples tested.
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104/105, Malviya, Pitambra Ind. Estate, L.B.S. Marg, Ghatkopar (W), Mumbai - 400086, INDIA. • Tel. : +91-22-2500 2811, 2500 2812
Email : info@biotechts.in / report@biotechts.in / biotechtestingservices@gmail.com / shilpanair@biotechts.in

Anti Viral Finish : Fabshield MF ECO Liquid

- ✓ Suitable For All Kinds Of Textiles
- ✓ Reduces The Viral Activity By Morphological Change Or Structural Damage To The Virus
- ✓ Applicable By Exhaust, Spray, Padding Methods



Test	ISO 18184 - Anti Viral Testing On Textile Substrate
Virus Advised	Feline Calicivirus, Influenza A H1N1 Or Influenza A H3N2
SARS Cov-2 STATUS	The Surrogates Are Human Corona

Current Status - Test results awaited...

Summary Of All Antimicrobial Products



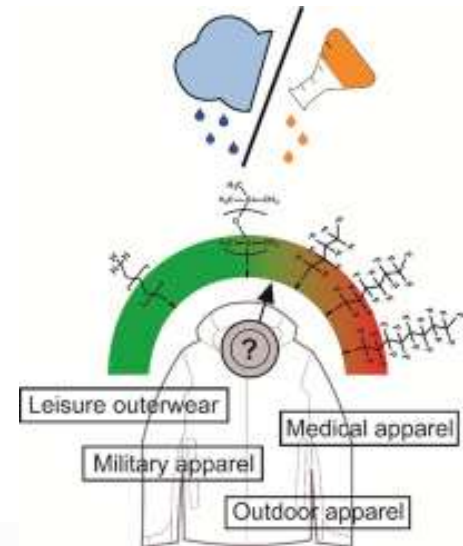
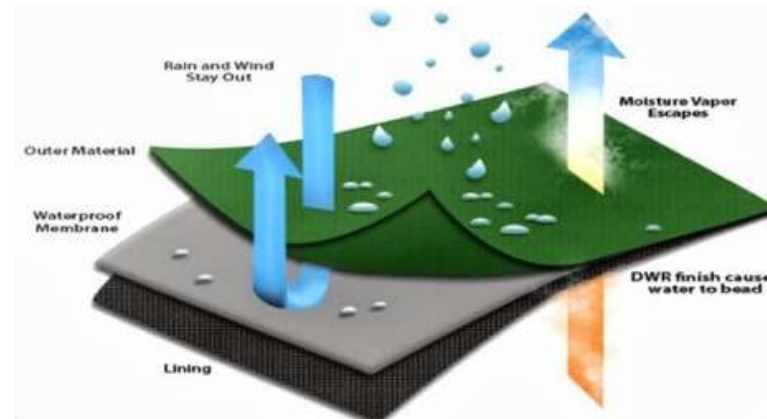
Sr. No	Product Name	Attributes	Chemistry	Durability	Test Method	Dosage By Padding	% Reduction In Microbes		
						Gm/Litre	After Treatment	After 15 HL	After 30 HL
1	Fabshield AEM 5700	Versatile Permanent Antimicrobial For All Substrates	Silane Quat	30- 40 HL	AATCC100, AATCC147, ASTM 2149, FZ/T73023 China	5 To 7	99%	95%	90%
2	Fabshield AEM 5772/5	Versatile Permanent Antimicrobial For All Substrates	Silane Quat	30- 40 HL	AATCC100, AATCC147, ASTM 2149, FZ/T73023 China	20 To 25	99%	85%	80%
3	Fabshield MF Cot	Antimicrobial & Antifungal For Cotton And Blends	Poly(hexamethylene Biguanide)	10-15 HL	AATCC 100, ASTM 2149, AATCC 30	10 To 15	99%	85%	
4	Fabshield MF ECO	Antimicrobial & Antiviral For Cotton & Blends	Quat Ammonium Compound	Under Testing		15 To 20			

Water Repellent Finishes

- Water Repellent Finish Is Different From The Waterproof Finish
- Water Repellent Are Chemical Finish
- Resist The Penetration Of Water Into The Fabric
- Permits The Passage Of Moisture Or Air Through The Fabric

Application Areas

- * PPE
- * Tarpaulins
- * Diver Suits
- * Umbrellas
- * Swimming Suits
- * Raincoats



Water Repellent Finishes

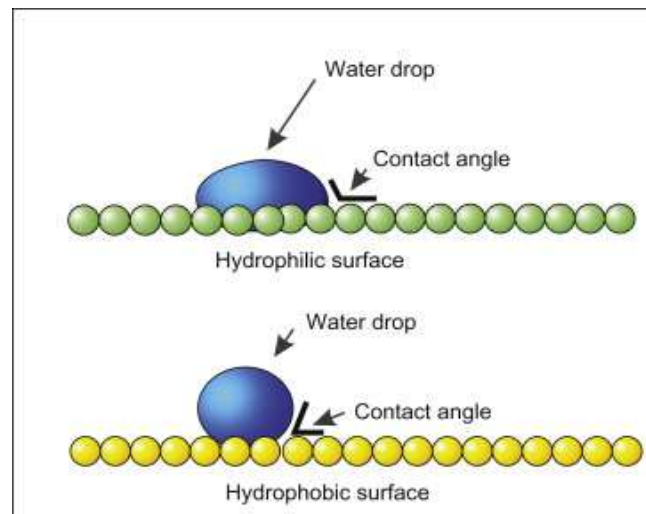
Repellent Chemistry

- ✓ Wax Finishes
- ✓ Pyridinium-based Finishes
- ✓ Organo-metallic Complexes
- ✓ Fat-modified Melamine Resins
- ✓ Silicones
- ✓ Fluorocarbons Finishes

Testing Methods

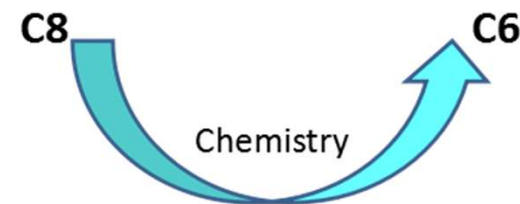
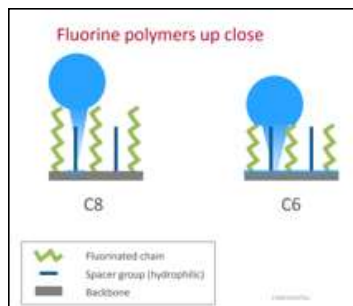
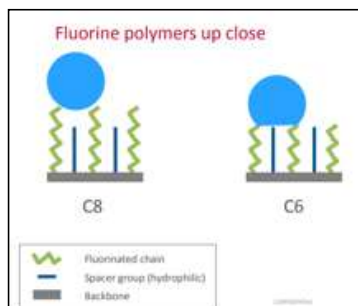
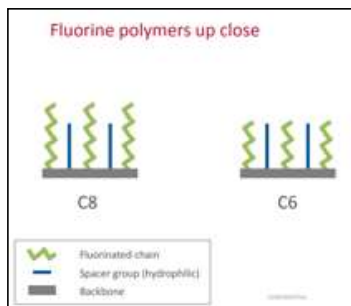
- AATCC 22
- AATCC 42
- ISO 9865 (DIN 53 888)
- AATCC 127
- ISO 811 Or EN 20 811

- ✓ Fluorocarbon Based Chemicals Are Mostly Used
- ✓ Strong Fluorocarbon Wall
- ✓ Fluorocarbons Made With C8 Are Considered As Hazardous
- ✓ Can Release Perfluorooctanesulfonate (PFOS) And Perfluorooctanoic Acid (PFOA) And Other Toxic & Hazardous Materials



Water Repellent Finishes

Mechanism of Action



PFOS and PFOA based

Not degradable

Low volatility

Accumulate in fishes

PFOS and PFOA-free

Fluorocarbon polymers
made from C₆-monomers

do NOT release
fluoroorganic compound

Expensive

Hyrogard E : Water and Oil Repellent

Hyrogard E Liquid

- Good Oil Repellency
- Compatible With Other Textile Auxiliaries
- Durable To Multiple Washes
- Excellent Compatibility With Finishing Baths
- Suitable For All Application Methods Such As Pad Bath, Kiss Roll, Exhaustion And Spray



Temper CWR Liquid - Crosslinking Agent

- Improves Durability Of Water Repellent Finishes To Much Greater Extent Up To 30 Washes
- The Abrasion And Dry Soil Resistance Is Outstanding
- Very Good Stain Resistance
- Does Not Affect The Handle Of The Fabric

UV Protective Finish

Mechanism

- ✓ Enhances The Light Fastness By Energy Transfer Mechanism
- ✓ Convert Electronic Excitation Energy Into Thermal Energy Via A Fast Reversible Intra Molecular Proton Transfer Reaction
- ✓ Function As Radical Scavengers
- ✓ Function As Singlet Oxygen Quenchers

UPF Ratings And Protection Categories		
UPF Rating	Protection Category	%UVR Blocked
15 - 24	Good	93.3 - 95.9
25 - 39	Very Good	96.0 - 97.4
40 and over	Excellent	97.5 or more

Textile's UV protection performance is determined by ultraviolet protection factor

Fabshield UV 100 Liquid

- ✓ Especially Suitable For Pad Application
- ✓ Excellent Effect As A Ultraviolet Inhibitor
- ✓ Suitable For All Kind Of Fibers
- ✓ Very Low Effect On Shade Due To Non Yellowing Property

Guideline Recipe

- Fabshield UV 100 Liquid - 40-60 gms/lit
- Pad at 70% expression and cure @ 170 - 180°C for 45-60 secs.

- **Measurement wavelength @**
290 nm - 390 nm
- Equipment used**
Shimadzu UV - 3100 PC

NORTHERN INDIA TEXTILE RESEARCH ASSOCIATION
(Linked to Ministry of Textiles, Government of India)
Sector-23, Rajnagar, Ghaziabad-201 002, India, Fax : 0120-2783596 E-mail: mail@nitratextile.org
Phone : 0120-2786434/451, 2783334/586/592/638/090/094/095, Website: www.nitratextile.org

TEST REPORT
 Chemical ECO Environmental Physical Polymer & Technical Textiles

Mr. Binani Fibrech Limited
201 A & B, Aakrati Corporate Park,
LBS Marg, Netaji GE Garden,
Kanjumang (VI)
Mumbai - 400 078
Kind Attn.: Mr. Manjiri Paranjape
Fax No.: 022-2479 6982

NABL/R-01A
Report No.: PTL-1626
Client's Ref.: Letter No. S-51 dt. 3.12.2010
Dispatch Ref.: NITRA/PTTD
Date: 23.12.2010
6127

Sample Description : 02 Samples described as "Unfinished Fabric & Finished Fabric"

Date of sample receiving : 15.12.2010 Date of results reporting : 23.12.2010

Sr.	Test Parameter	Test Method	Test Results
1	Sample - Unfinished Fabric Ultra Violet Protection Factor (UPF)	As per AATCC-183	15.73
2	Sample - Finished Fabric Ultra Violet Protection Factor (UPF)	As per AATCC-183	48.78

Any Observation/Comment :

[Signature]
Officer-in-charge

[Signature]
Head of Division
Authorized Signatory

Antistatic Finish

- ✓ Static Electricity Is Created When Two Non-conducting Surfaces, Such As Synthetic Textiles, Rub Together.
- ✓ Static Electricity Also Causes Fabrics To “Cling”, When Two Layers Of Clothing Rub Together, Causing Discomfort.
- ✓ Dust And Lint Being Attracted To Fabrics



Electrostatic charge generated due to

- ✓ Charge transfer during surface contact
- ✓ Charge leakage across gap
- ✓ Charge flow along the surface

Antistatic Finish

Test methods for Antistatic Finish

Test Method	AATCC 76	ASTM D 4238
What Is Tested	Electrical Surface Resistivity Of Fabrics	Half Decay Time Of Electrostatic Charge
Measurement Unit	Resistance in Ohms	Time in Sec
Principle OF Testing	The scope of this method is to determine the electrical surface resistivity of the fabric. This test method measures the resistance of fabric to the flow of current between two electrodes	The scope of this method is to measure time in Min for maximum Voltage Induced On The Textiles To Be reduced to Half.
Suitability	May be ideal for Coated Textiles/Insulators	Not Applicable For Pile Fabric



Antistatic Finish



PRODUCT	EXHAUST METHOD	POLYESTER YARN
Rosil ASRW Liq.	1.0 - 3.0 %	Adjust pH 5 -5.5, treat at 40- 60°C for 20-30 mins., dry

Outside Lab Report

STATIC CHARGE ESTIMATION RESULTS (ASTM D - 4238 -95)

Sample details	Untreated	Rosil ASRW Liquid
Total charge developed (volts)	2010	1200
Half decay time (seconds)	63.5	3.9

Instrument: Static Honestometer
 Charging volts : 10 KV
 Sample Distance : 15mm

Relative Humidity : $45 \pm 5\%$
 Temperature : $27 \pm 2^{\circ}\text{C}$

THE BOMBAY TEXTILE RESEARCH ASSOCIATION
 BTRA TEST LABORATORIES
 Mumbai - 400 084

TEST REPORT

Report Details: BLY/5W 430 (01)3 DT: 01/02/2013 Sample: YARN

Customer: M/s. ROSSARI BIOTECH LTD. Code: BLY/5T TO 5H
 Reference: REF. No. (15-13) (1)D: 18/01/2013 No. of Samples: THREE (3)
 Received on: DTD: 19/01/2013 Total Pages: 1 OF 1
 Date of performance of Test: 22/01/2013 TO 31/01/2013 Despatched on:

TEST RESULTS

SAMPLE NO.	BLY/5T	BLY/5H	BLY/5H
SAMPLE MARK	Hydrostat Liquid	Rosil ASRW Liquid	Untreated

INVESTIGATION : STATIC CHARGE ESTIMATION
 TEST METHOD NO. : ASTM D : 4238-95
 Charging Voltage : 10 KV Relative Humidity : $45 \pm 5\%$
 Sample Distance : 15 mm Temperature : $25 \pm 2^{\circ}\text{C}$
 Sample Conditioning : At 45% RH for One Week

RESULTS

SR NO.	SAMPLE DETAILS	TOTAL CHARGE DEVELOPED (V/m)	HALF DECAY TIME (secs)
1.	BLY/5T (Hydrostat Liquid)	1770, 2101, 1804, 1283 Avg. 1715 \pm 1120	7.8, 6.4, 5.4, 5.5 Avg. 6.15
2.	BLY/5H (Rosil ASRW Liquid)	1383, 553, 1166, 1770 Avg. 1203 \pm 1200	4.2, 2.8, 3.0, 5.0 Avg. 3.9
3.	BLY/5H (Untreated)	1825, 1770, 2101, 2323 Avg. 2005 \pm 2810	58, 30, 124, 12 Avg. 63.5

M.K.K. Kamal
 Laboratory Manager
 BTRA Test Laboratories
 01/02/2013

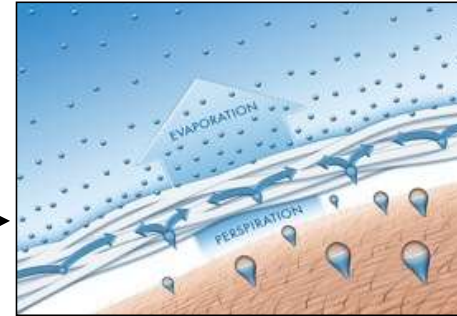
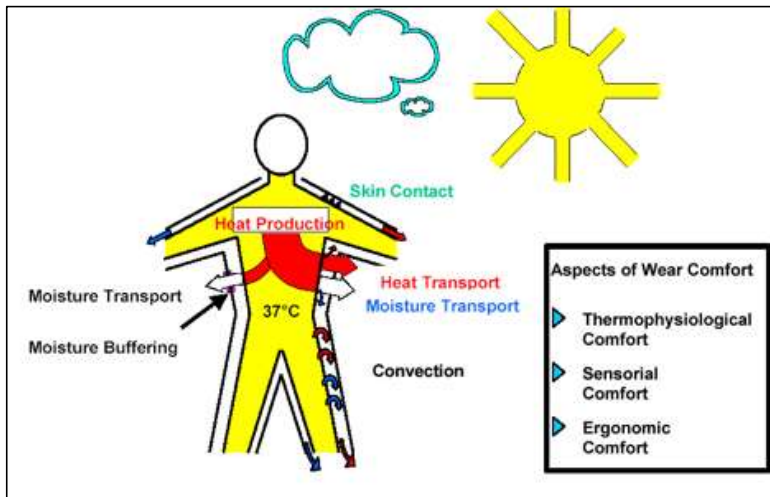
BTRA TEST Laboratories is assessed and Accredited by NABL in accordance with ISO/IEC 17025:2005.

Samples are not drawn by the Laboratory. The test results relate only to the item tested. This report shall not be reproduced except in full without prior permission of this Laboratory. This report shall not be used for litigation or publicity.

AVAIL SERVICES OF BTRA FOR TOTAL SOLUTIONS.

Thermoregulation & Moisture Management

Energy Balance of Human Body

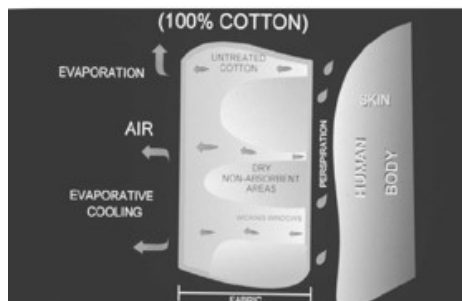


Absorption: The fabric's process of pulling moisture into the fibers, not necessarily keeping moisture away from skin.

Breathability: Measured by the amount of water vapor which can be transmitted through a fabric.

Moisture Transfer: The movement of moisture from skin into and through wicking fibers to the outermost layer of the fabric where moisture is dispersed across its surface in order to evaporate.

Wicking Properties: The ability of a fabric to transfer (or 'pull') moisture through itself and away from skin to the outside/exterior.



Thermoregulation & Moisture Management



Benefits:

- Superior Moisture Absorbency
- Superior Wicking Properties
- Maintains Thermal Comfort:

Roswik 14-H Liquid

Wash Fast Superabsorbent That Produces Wash As Per International Wicking Norms

Rosil Getz Liquid

Wash Fast Superabsorbent That Produces Wash As Per International Wicking Norms

Snocool SRB Liquid

A Non Ionic Polymer Solution Which Produces Permanent Cooling Effect On Treated Fabric By Effective Moisture Management

Test Results from ITS

1. Wicking

P136B

Vertical rise in mm after 3 minutes

	(A)
Average Length	5 mm
Average Width	3 mm
	(B)
Average Length	73 mm
Average Width	71 mm
	(C)
Average Length	78 mm
Average Width	75 mm

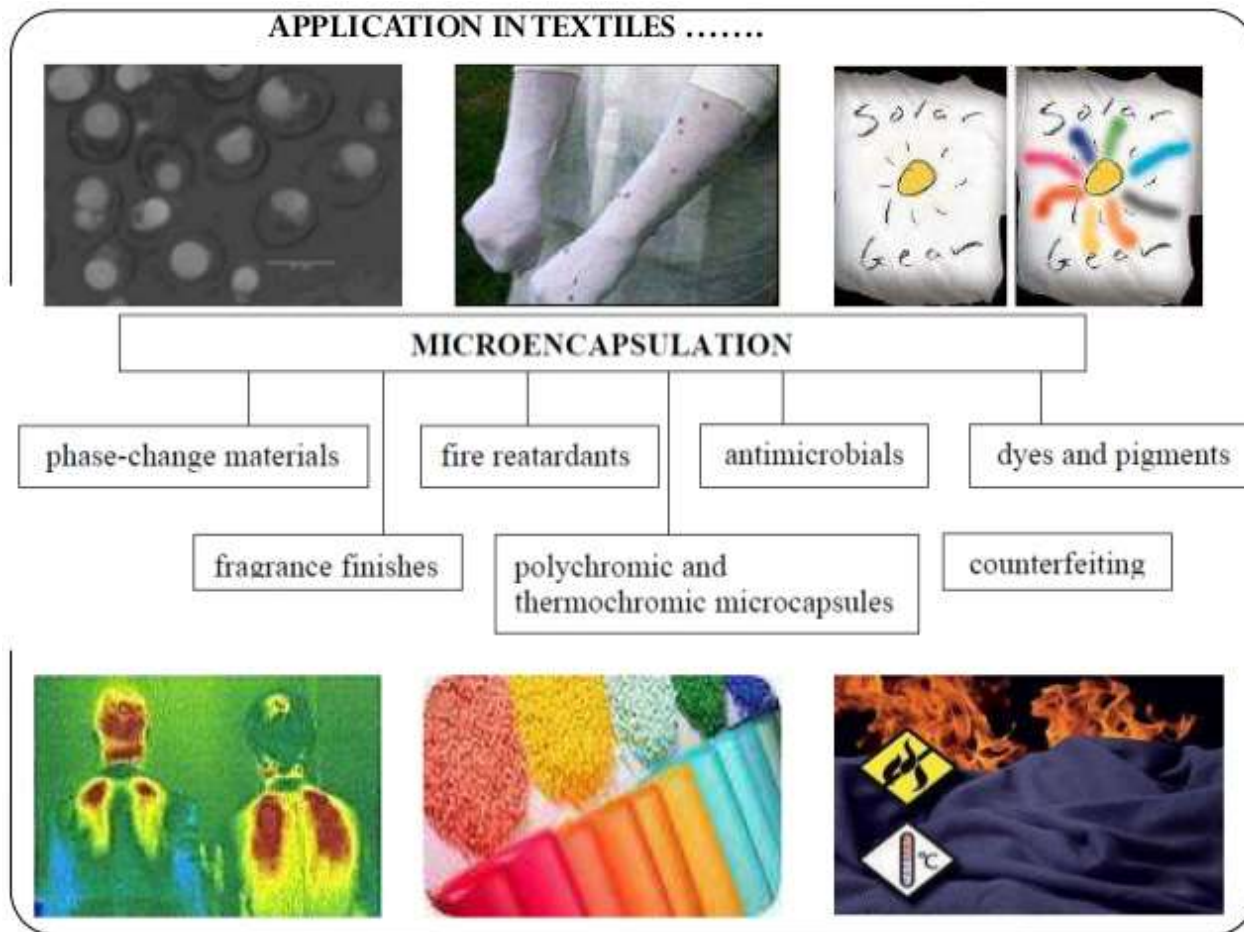
1. Evaporation

P136A

After Wash

	(A)	(B)	(C)
After 5 Min	1.4%	1.8%	1.3%
After 10 Min	3.0%	3.8%	2.7%
After 15 Min	5.1%	5.9%	4.2%
After 20 Min	7.1%	8.3%	5.7%
After 25 Min	9.4%	10.6%	7.5%
After 30 Min	11.1%	13.2%	9.4%

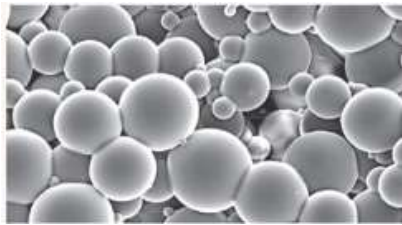
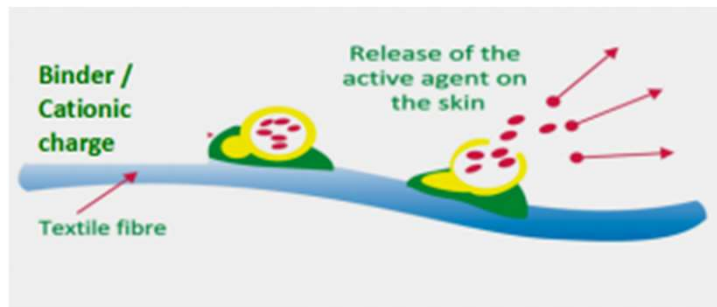
Microencapsulation Technology



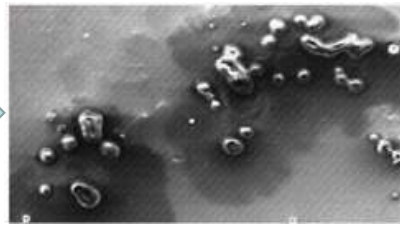
Microencapsulation Technology

Microencapsulation Technology

The Microcapsules Are Manufactured With A Protective Polymeric Coating Or Melamine Shell



Microcapsules



Release of actives

Fragrances

- ❖ Essential Oils - Flowers, Fruits, Essences
- ❖ Aromatherapy Blends - Lavender, Alpine
- ❖ De-odorizing Technique
- ❖ Insect-Repellents - Menthoglycol, DEET
- ❖ Skincare Active Ingredients - Aloe Vera , Vitamin E
- ❖ Cosmetic Oils
- ❖ Herbal Oils
- ❖ Cyclodextrin

Magic Of Microencapsulation - Aroma UNLOCKED!!

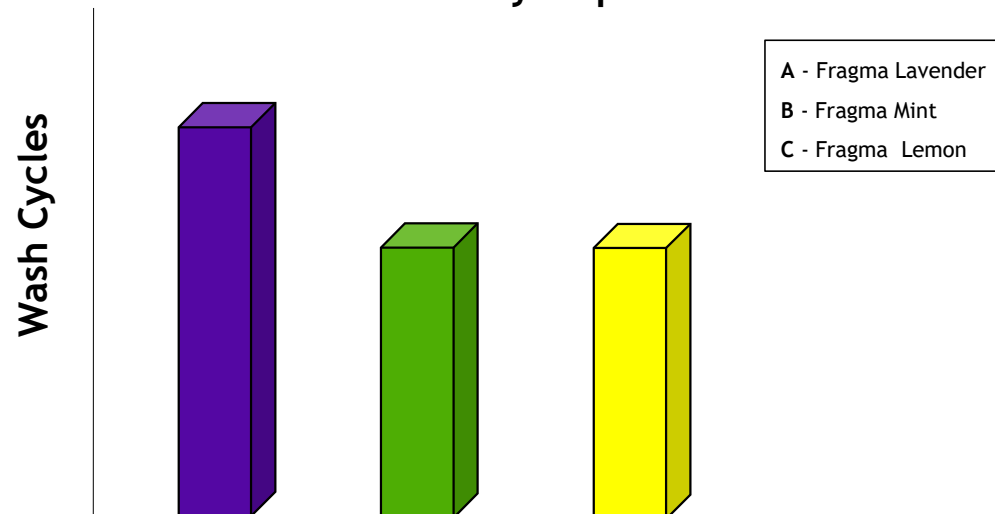
Encapsulated Aromatic Emulsions For Textiles

- ✓ Imparts Fragrance, High Softness And Body Break
- ✓ Easily Water Dispersible
- ✓ Application By Padding (15 to 20 gm/lit)

Product range

Fragma Lemon Liquid
Fragma Mint Liquid
Fragma Lavender Liquid
Fragma Jasmin Liquid
Fragma Musk Liquid
Fragma Sandalwood Liquid
Fragma Vanilla Liquid
Fragma Green Apple Liquid

Wash Durability - Up To 15 HL



Areas Of Application - Curtains, Upholstery,
Bed & Bath, Scarves, Hizab,

Magic Of Microencapsulation - REJUVENATE WITH ALOE VERA!!



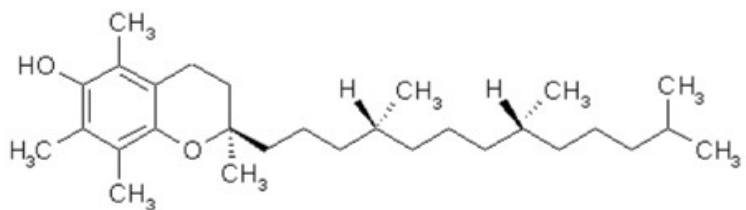
Aloe Vera Finish Benefits

- ❖ Known For Keeping Your Skin Clear And Hydrated
- ❖ Restores The Natural Balance Of Body And Skin
As A Moisturizer And A Pain Soother
- ❖ Nourishing Effects on Human Skin & Whole Body
- ❖ Acts As Moisture Controller



Magic Of Microencapsulation - STAY YOUNG WITH VITAMIN E!!

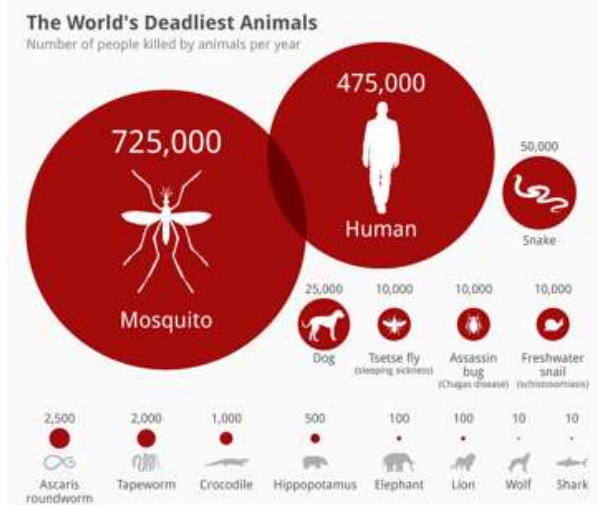
- Demand For Functional Finishes Has Been Increasing Rapidly In Textile
- Vitamin E Plays A Major Role In Influencing The Human Health
- Protect The Functioning Of Cells And The Intracellular Processes
- Also Has Anti-oxidant Property
- Application With Microencapsulation Technology Is Possible



- ❖ Helps To Prevent Signs Of Aging
- ❖ Keeps Skin Hydrated And Calm
- ❖ Reduces Sun Damage
- ❖ Can Help To Reduce The Appearance Of Scars
- ❖ Helps To Moisturize Skin

Mosquito Repellent Finishes

- ❖ Mosquito Is The Most Dangerous Insect
- ❖ Mosquito-borne Diseases, Such As Malaria, Dengue Fever (DF), Nile Fever, dengue Hemorrhagic Fever (DHF), Chicken Gunia And Filariasis Etc
- ❖ Transmission Through Mosquito Bite
- ❖ Prevention Of Mosquito Bites



- ❖ Mosquito Repellent Finish
- ❖ Applied To Textile Which Repels Away The Mosquitoes

Mosquito Repellent Finishes

Key Features

- ❖ Used In Apparels And Also In Home Textile Industry.
- ❖ Mosquito Prone Areas Also Find Their Application In Wall Coverings And Tens.



Excito Repellency Chamber Test (WHO Method)

- Mosquitos Used - 10 Female Anopheles
- Metal Chamber With Flexible Sides And Top Window For Viewing
- Modified WHO/CTD/WHO PES/IC/96.1 Method

Size Of Fabric: 1 Meter

Dosage : 20gpl Mosquito Repellent

Test Result: 100% Repellency

Wash Fastness: 1- 2 Washes Currently



Special Softener For Wellness Finishes - Marvel Soft Liquid



Break the Mould in This Moment of Uncertainty,
Enter the "New Portal" of Touch with Wellness

Rossari Is Ahead of
Time & Brings to you
Marvel Soft-
Softness with Wellness!

With Wellness Finishes gaining importance, compatibility of Softeners in the finishing baths is a challenge that Rossari has taken head-on to bring you the right product for your need.

Marvel Soft - Indulge in the touch of Ivory, Adding Feel & Comfort to your Fabric, with no Compromise on Performance Finishes added to it.

Softener that Complements Wellness!

Your Wellness is our Goal

Special Softener For Wellness Finishes - Marvel Soft Liquid



Shortcomings With Conventional Softeners...

- ✓ Not Compatible With Wellness Finishes
- ✓ Spotting, Bath Separation
- ✓ Separate Application Needed
- ✓ Performance Issues

Rossari Is Ahead of time - Presents Marvel Soft Liquid

- ✓ Excellent Hydrophilicity & Water Retention
- ✓ Bulkiness With Inner Softness
- ✓ Compatible With Wellness Finishes Like Antimicrobial, Antifungal... In Single Bath Application
- ✓ Compatible With All Anionic Products Like OBAs In Finishing Recipes
- ✓ Your White Will Remain White



- Robust Formulation
- Unique Handle
- Excellent Durability

Product Selection Grid

Product Name	Functionality	PPE Disposable	PPE Reusable	Masks Nonwoven	Masks Fabric	Medical Gowns	Workwear	School Uniforms	Upholstery	Bed & Bath	Mosquito Nets
Fabshield ANV	Fresh/Odourless	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Fabshield AEM 5772/5	Antimicrobial/ Moderate Water Repellency	✓	✓	✓	✓	✓	✓	✓	✓		✓
Fabshield MF Cot	Antifungal/ Antimicrobial					✓	✓	✓	✓	✓	
Hydrogard E Liquid	C6 Water Repellent	✓	✓	✓	✓	✓	✓	✓	✓		✓
Temper CWR Liquid	Crosslinker C6	✓	✓	✓	✓	✓	✓	✓	✓		✓
Fabshield UV 100 Liquid	UV Protection						✓	✓	✓		
Marvel SOFT	Robust Softener For Wellness Finishing					✓	✓	✓	✓	✓	
Ultrabounce CRV	Abrasion Resistance		✓			✓	✓	✓	✓		
Fragma series	Fragrance Finishes			✓	✓	✓	✓	✓	✓	✓	
Aloe Vera/ Vitamin E	Wellness Series			✓	✓	✓	✓	✓	✓	✓	
Mosquito Repellent	Mosquito Repellent								✓	✓	✓

Q & A Session





For Any Queries , Pl Contact :

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