We Welcome YOU all !

Webinar on ....

Textile Finishes - New Vista !

Hosted By

ROSSARI™
making you more competitive

Thursday, 21st May 2020
11:00 AM to 11:45 AM

Introduction - 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

Introduction

ROSSARI BIOTECH LIMITED

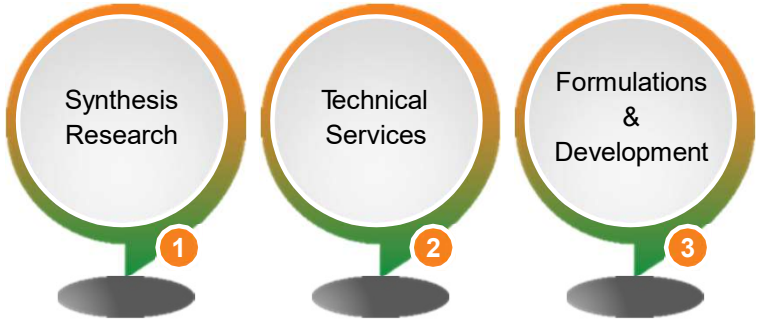
(An ISO 9001:2015 & 14001:2015 Certified Company)

Rossari Biotech Ltd.

- Established in 1996, We Are The **SINGLE LARGEST TEXTILE CHEMICAL MANUFACTURER** In India With Total Sales Of 100 mio USD
- **Provides End To End Solution In Textile Processing & Tailor Made Solutions To Our Customer**
- Pioneer In Developing Sustainable Green Alternatives Against Conventional Harsh Chemicals
- **Clientele Of 8000+ Customers Around The Globe & Growing**
- Manufacture Wide Range Of Products From Preparation To Performance Finishes
- **Largest Supplier Of Silicone Softeners In The Country, Now Asia - Terry towels and Knits**
- **Annual Production Capacity 1,70,000 MT**
- **Completed All Statutory Requirements For IPO**

Customer Centric and Sustainability Focused R&D Capabilities

Research & development covers all aspects of products



Research & development capabilities

- Two R&D facilities: Silvassa and Mumbai
- 22 employees dedicated and experienced R&D team
- Rich experience across the business leading to expertise in formulation and development

Research & development strengths

1. Agility
2. Speed
3. Sustainability
4. Innovation
5. Customization
6. Cost Competitiveness

Where You Find Us...

Animal Health
& Nutrition

Textiles

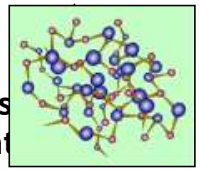
Ceramics

ROSSARI
making you more competitive

Silicone
Oil

Speciality Chemicals
For
Coatings, Paints &
Inks

Polymers
For
Paints, Ceramics
Water Treatment
Paper & Textiles



Laundry & Industrial
Cleaning Chemicals

Presence Across India And Abroad With Dedicated Distribution And Sales Network

Network of 206[1] distributors covering Pan - India and 29 distributors across 17 countries

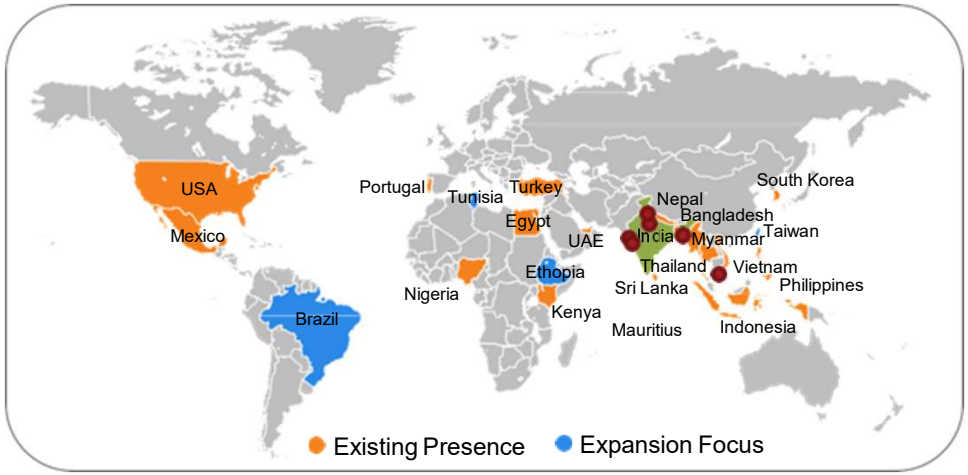
Home, Personal Care and Performance Chemicals

Pan-India coverage

Wide network of 60 distributors

Animal Health and Nutrition

Network of 37 distributors



Textile Specialty Chemicals

109 distributors in India

19 overseas distributors across 16 countries

4 regional & 2 international offices

Techno - Marketing Team

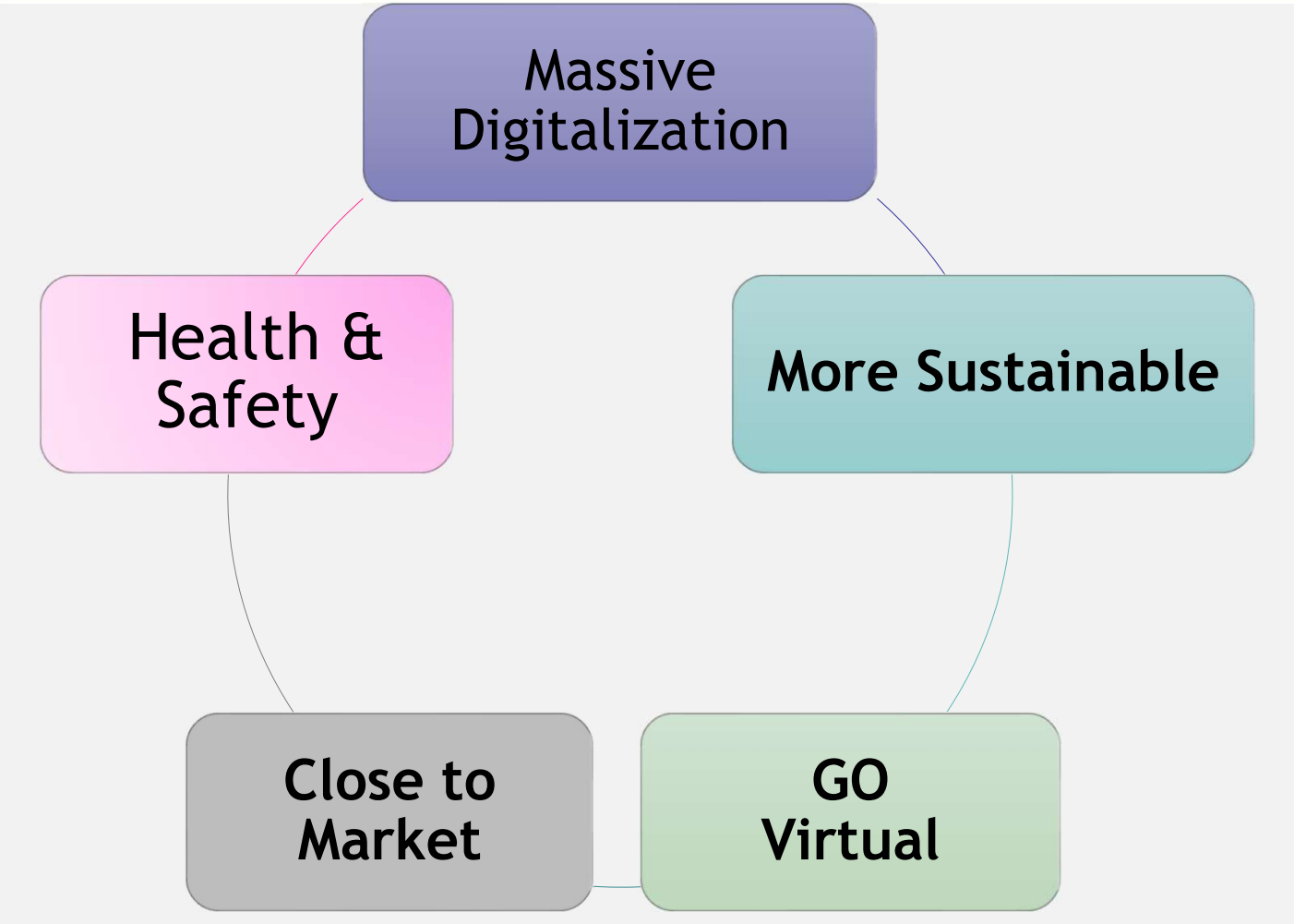
175 dedicated employees in sales and marketing team

- Liaise with the distributors on a regular basis for customer inputs, market demands & positioning of products *vis-à-vis* products of competitors
- **Technically equipped**, the team closely works with customers to understand the specific needs for customization of products & provide on-the-spot solutions to basic customer problems

(1) As on January 31st, 2020

Awards & Recognitions

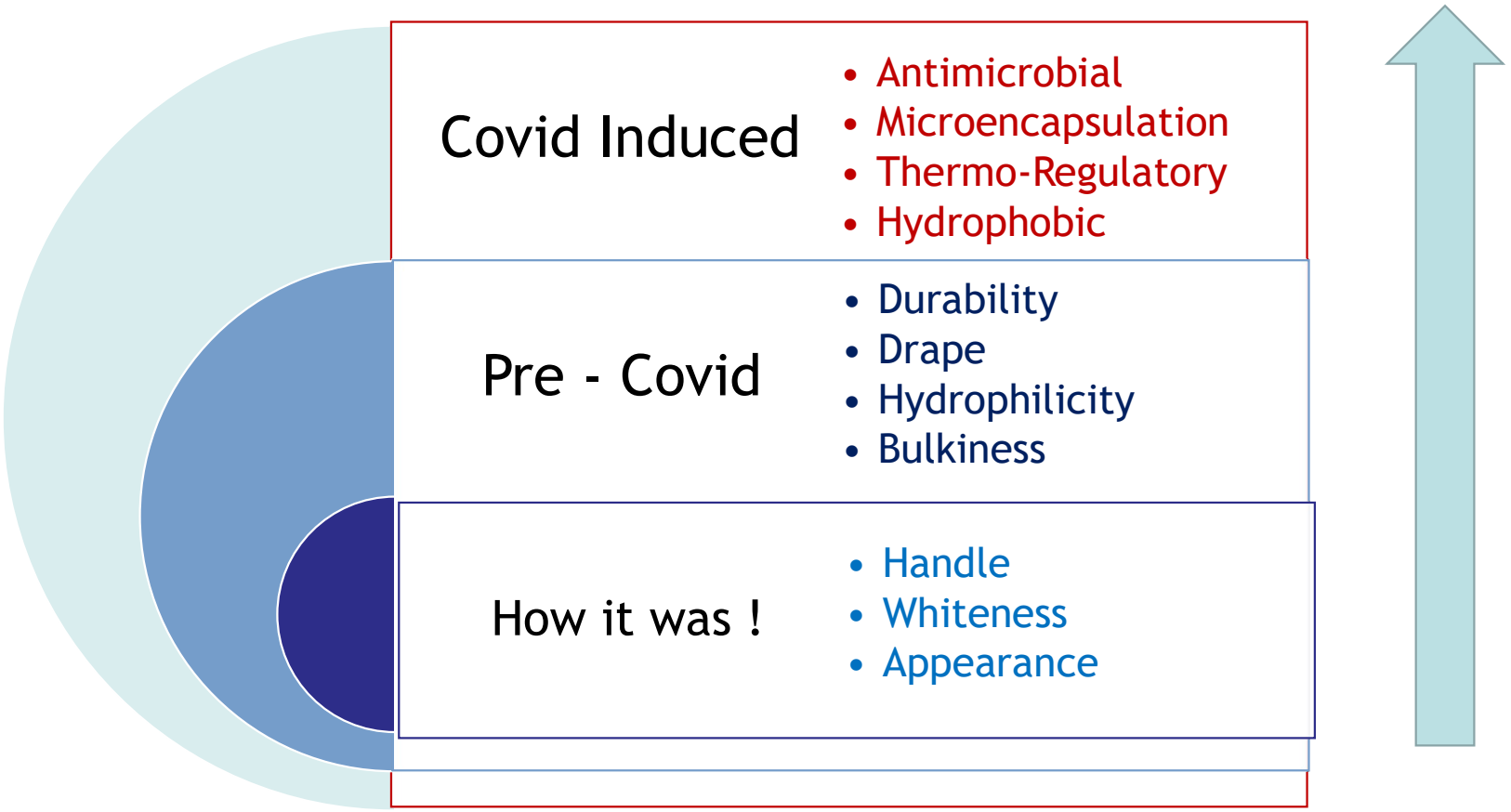
Textile Industry 2020 & Beyond !



Focus Is Shifting

- Preserve
- Prevent
- Protect

Future of Textile Finishing !



Future of Textile Finishing !

- ✓Fabric Will Have To Bring Science & Fashion Together
- ✓Finishes Will Have To Be More Protective , Functional & Durable
- ✓Multifunctional Clothing – Value For Money
- ✓Buying Decision Will Be Based On Comfort, Hygiene & Safety
- ✓Home Textiles Which Can Offer Sense Of Peace, Joy & Purity Will Be Preferred

Wear WELLNESS : Your Wellness Is Our GOAL !

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

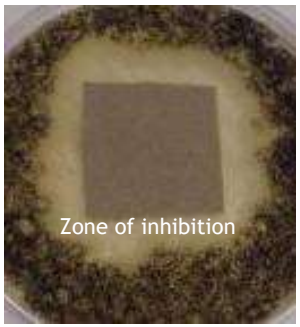
Comfort

- ✓ Thermo- Regulation
- ✓ Moisture Management

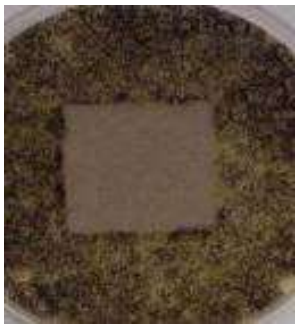
Antimicrobial Finishes In Textiles

Antimicrobial Finishes

Types Of Antimicrobials



Leaching



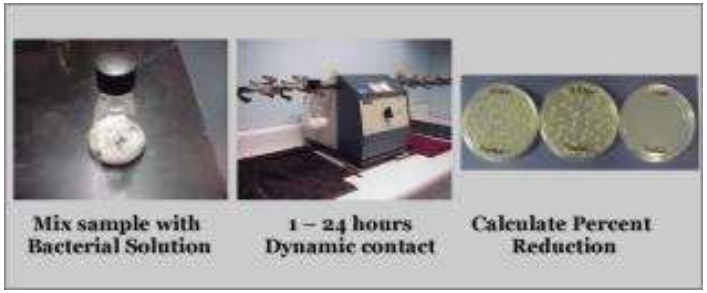
Non Leaching

Based On

- Silver
- Chloroxyphenol
- Zinc Pyrithione
- PHMB

Test Methods

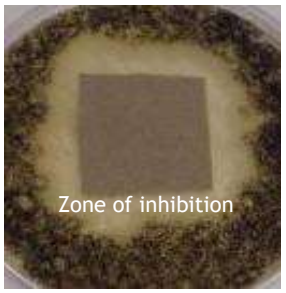
Bromophenol Blue (BPB) Direct Stain



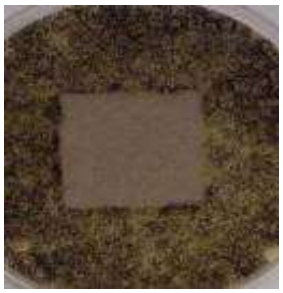
ASTM E2149-01 Dynamic Shake Flask Test

Antimicrobial Finishes

Types Of Antimicrobials



Leaching



Non Leaching

Based On

- Silver
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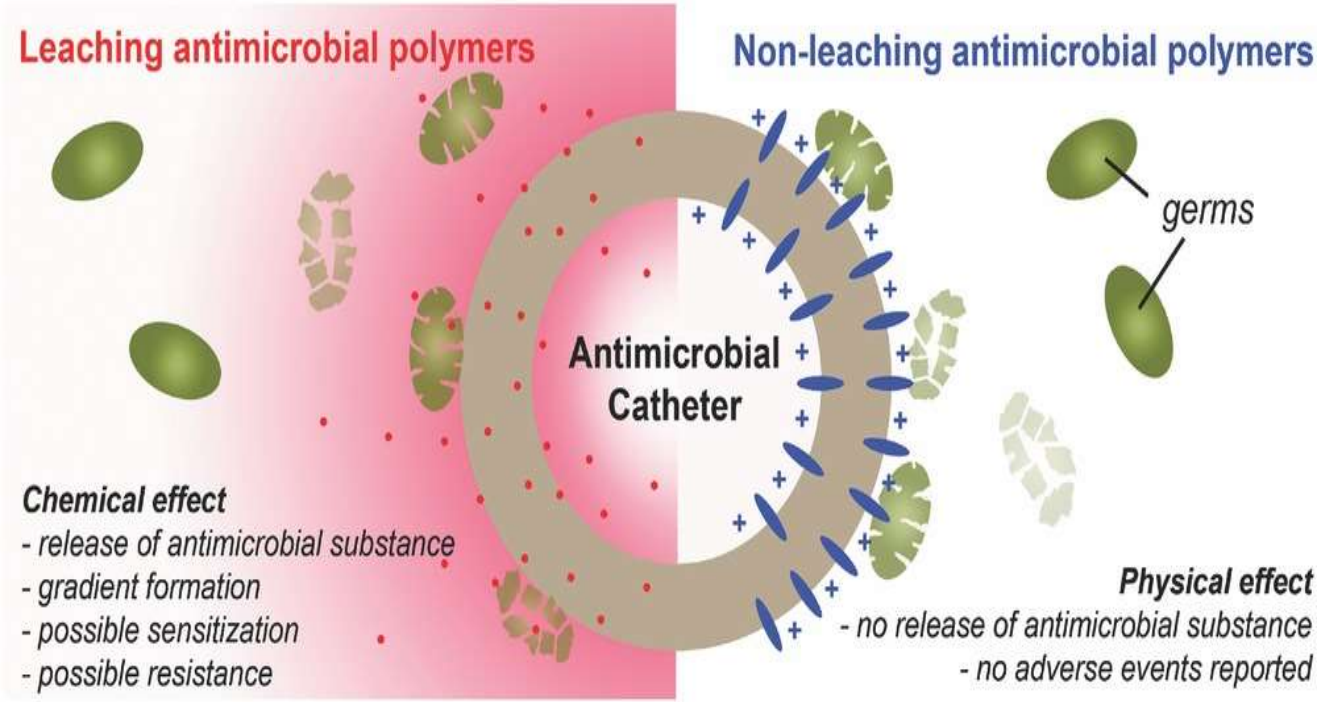
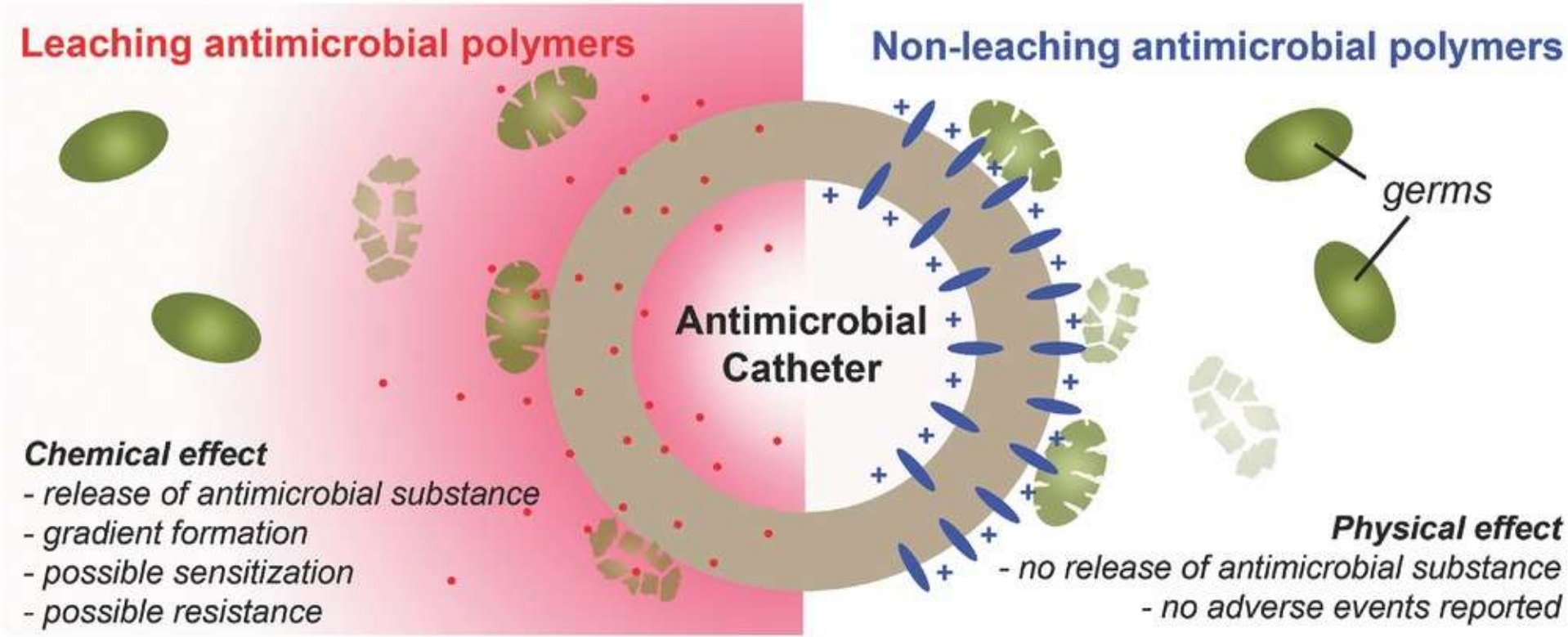


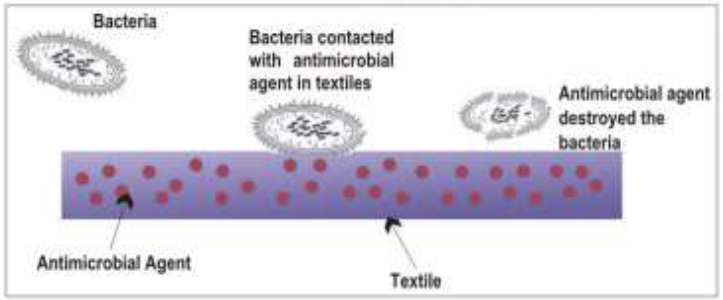
Comparison Based On Efficiency

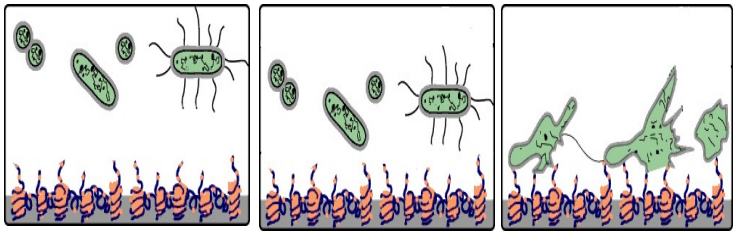


Antimicrobial Finish : Fabshield AEM 5700 Liquid

- Maintains Hygiene And Freshness
- Eliminates The Chances Of Disease Transmission
- Stops Bad Odor & Skin Irritation
- Controls Or Eliminates Microbial Staining
- Improves Life Of The Articles Wherever It Is Applied
- Durable Throughout The Life Of The Product
- Can Be Applied On All Natural And Synthetic Textiles
- Minimal Effect On Shade

Mechanism of action





**for more information refer TDS*

Comparative Study For Commonly Used Antimicrobial Technology

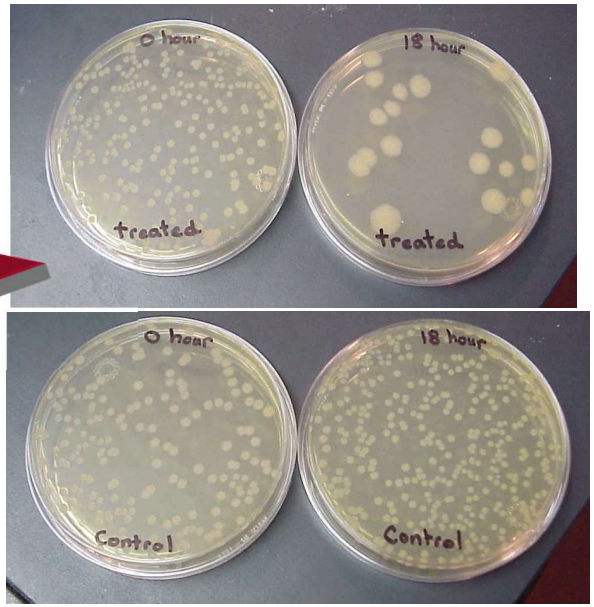
Sr. No	Parameters	Criteria	Zinc Based	Nano Silver Based	Silver Polymer Based	Rossari's Silane Based	Comments
A	Consumer Safety	Mode Of Action	Leaching	Leaching	Non Leaching	Non Leaching	Non Leaching Is Safer
		Environmental Safety	Not Safe	Moderately Safe	Moderately Safe	Safe	Zinc Not Safe For Aquatic 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 Permenant
		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	

Verification Methods

AATCC 100-1999:

Bacteria & Substrate

Bacterial Retrieval



Calculate % Reduction

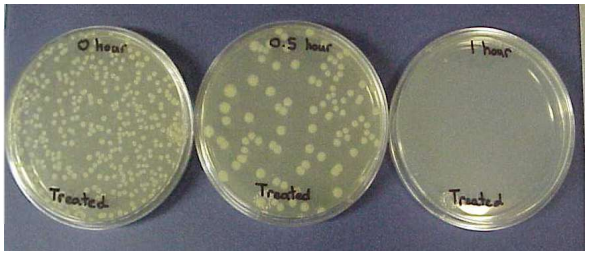
Evaluation Of Antibacterial Finishes On Fabrics

Verification Methods

ASTM E 2149-01:

18 Hours
Contact

1 Hour
Agitation



Calculate % Reduction

Determining The Antimicrobial Activity Of Immobilized Antimicrobial Agents Under Dynamic Contact Conditions

Antifungal Finish : Fabshield MF COT Liquid

- ✓ Suitable For Cotton, Cotton Rich Blends
- ✓ Durable
- ✓ Application pH Should Be Above 6.5-7.0
- ✓ Eliminate Or Reduce The Odor Created By Yeast, Fungus And/Or Bacteria
- ✓ Maintains Freshness
- ✓ Applicable By Exhaust, Spray, Padding Methods
- ✓ No Special Equipment Required

Performance Testing
Test Standard: AATCC Test Method 30; Lll 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

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			

Freshness Finish : Fabshield ANV Liquid

Microbial Problem Associated With Packing

Terry Towel Packed At Manufacturers End

Shipment to customers

Foul Smell Immediately After Carton Is Opened Due To Microbial Growth During Transit

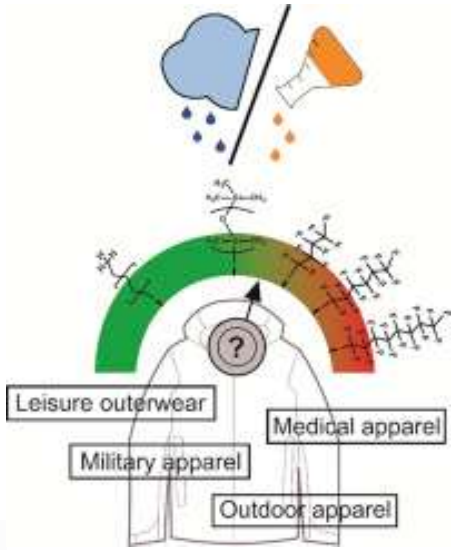
Opening Of Carton After 6-8 Months

Fabshield ANV Liquid

- Acidic In Nature
- **Core Alkali Neutralizer With Antimicrobial Properties And Odourless.**
- Doesn't Causes Any Tendering Or Yellowing Of Fabric Since It Is Based On Organic Acids.
- No Loss In Hand Or Feel Of Fabric
- Can Be Taken In Final Finishing Bath Along With Softener
- Eliminates The Use Of Acetic Acid In Final Softener Bath Which Is Also Responsible For Smell.

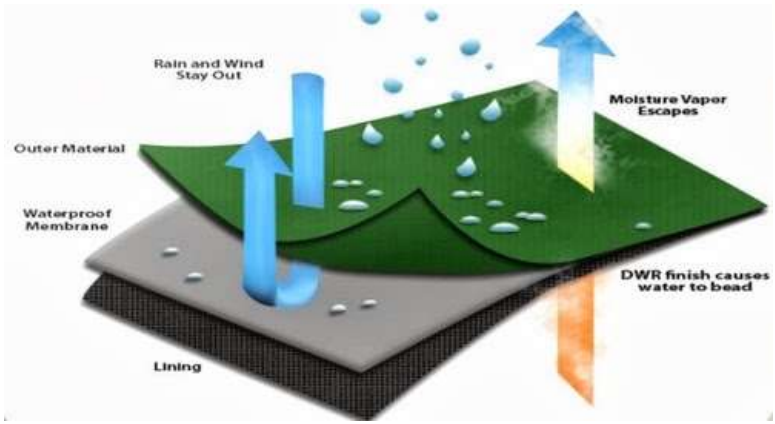
Water Repellent Finishes

- Water Repellant 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	* Umbrellas
* Tarpaulins	* Swimming Suits
* Diver Suits	* Raincoats



Water Repellent Finishes

Repellent Chemistry

✓Wax Finishes

✓Pyridinium-based Finishes

✓Organo-metallic Complexes

✓Fat-modified Melamine Resins

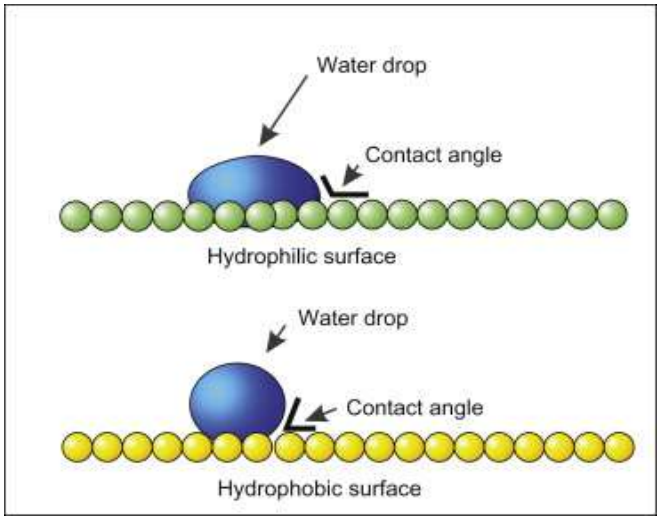
✓Silicones

✓Fluorocarbons Finishes

- ✓ 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

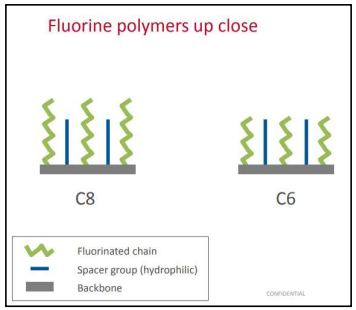
Testing Methods

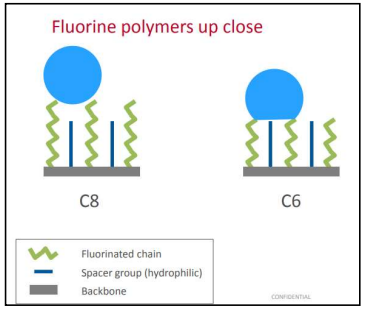
- AATCC 22
- AATCC 42
- ISO 9865 (DIN 53 888)
- AATCC 127
- ISO 811 Or EN 20 811

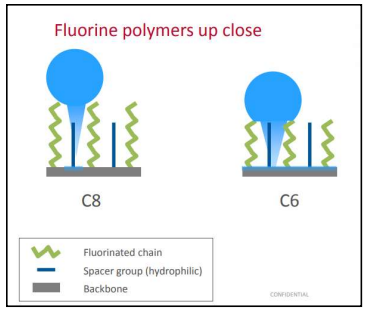


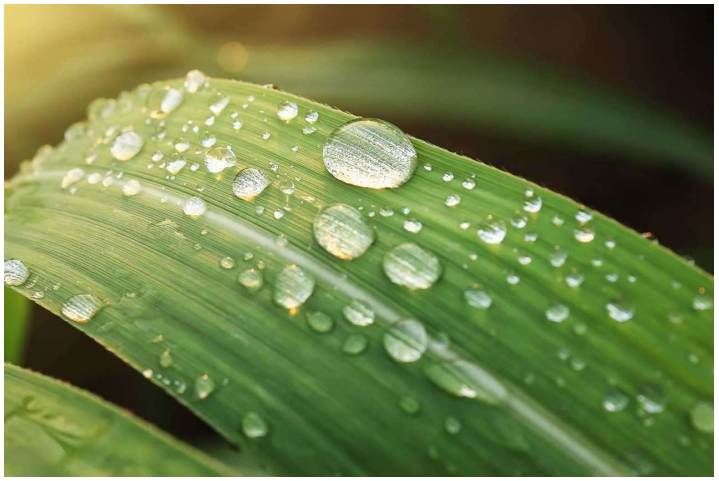
Water Repellent Finishes

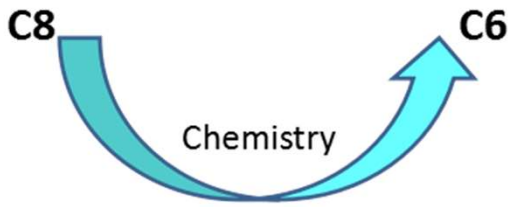
Mechanism of Action











PFOS and PFOA based

Not degradable

Low volatility

Accumulate in fishes

PFOS and PFOA-free

Fluorocarbon polymers made from C_6-monomers

do NOT release fluoroorganic compound

Expensive

Hydrogard E : Water and Oil Repellent

Hydrogard 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

AATCC 22 : Test Method

Purpose & Scope

AATCC 22 test method is applicable to any textile fabric, which may or may not have been given a water-repellent finish. It measures the resistance of fabrics to wetting by water. It is especially suitable for measuring the water-repellent efficacy of finishes applied to fabrics.

AATCC 22 Test Apparatus

Principle

Water sprayed against the taut surface of a test specimen under controlled conditions produces a wetted pattern whose size depends on the relative repellency of the fabric. Evaluation is accomplished by comparing the wetted pattern with pictures on a standard chart.

AATCC 42 : Test Method

Purpose & Scope

AATCC 42 Water Resistance is applicable to any textile fabric which may or may not have been given a water-resistant or water-repellent finish. The test measures the resistance of fabrics to the penetration of water by impact, and thus can be used to predict the probable resistance of fabrics to rain penetration. It is especially suitable for measuring the penetration resistance of garment fabrics. The results obtained with this test method depend on the water repellency of the fibers and yarns and on the construction and finish of the fabric.

Principle

A volume of water is allowed to spray against a taut surface of a test specimen backed by a weighed blotter. The blotter is then reweighed to determine water penetration and the specimen is classified accordingly.

AATCC 42 Test Apparatus

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

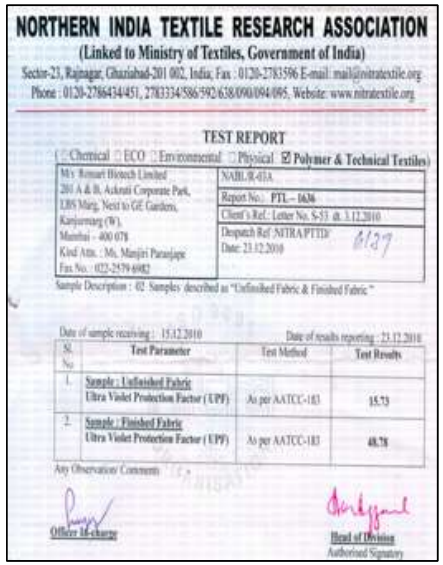
Textile's UV protection performance is determined by ultraviolet protection factor

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^{O}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)

M/s Rossari Biotech Limited 203 A & B, Ackruti Corporate Park, LBS Marg, Next to GE Gardens, Kanjurmarg (W), Mumbai - 400 078 Kind Attn. : Ms. Manjiri Paranjape Fax No. : 022-2579 6982	NABL/R-033A Report No.: PTL – 1636 Client's Ref.: Letter No. S-53 dt. 3.12.2010 Despatch Ref: NITRA/PTTD/ 6137 Date: 23.12.2010

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

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

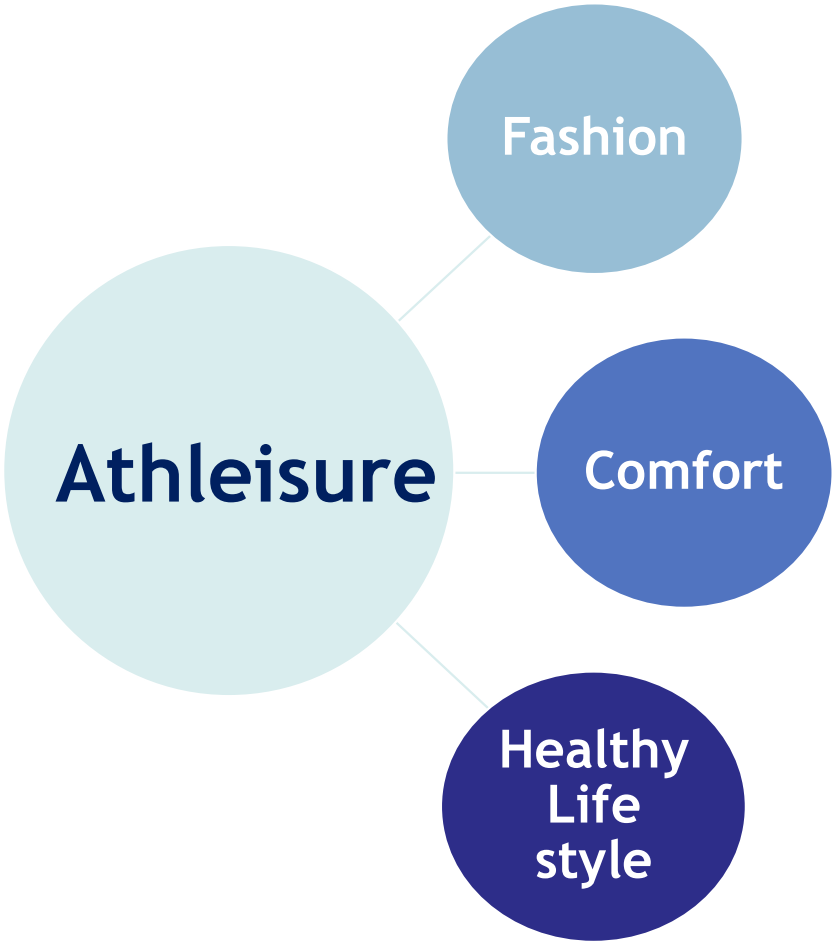
Sl. No.	Test Parameter	Test Method	Test Results
1.	Sample : Unfinished Fabric Ultra Violet Protection Factor (UPF)	As per AATCC-183	15.73
2.	Sample : Finished Fabric Ultra Violet Protection Factor (UPF)	As per AATCC-183	48.78

Any Observation/ Comments :

Officer In-charge

Head of Division
Authorised Signatory

Athleisure – Tomorrow's Trend and Today's Opportunity



- Segment Has Grown 42% In Last 7 Years
- Market Size $270 Billion
- Predicted To Grow By Another 30% By End Of 2021

Antistatic Finish

- ✓ Static Electricity Is Created When Two Non-conducting Surfaces, Such As Synthetic Textiles, Rub Together.
- ✓ While Walking On Carpets, Especially In Rooms In Which Computers Are Used, Because Of Computers And Their Electrical Components Synthetic Fabrics Are Prone To Generate Static Charge And Give Shock.
- ✓ 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

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^{0}C for 20-30 mins., dry

Outside Lab Report

THE BOMBAY TEXTILE RESEARCH ASSOCIATION

BTRA TEST LABORATORIES

TEST REPORT

BL / 03A

Report Details : BTL/TR/ 420 /2013 DT : 01.02.2013 Sample : YARN

Customer : M/s. ROSSARI BIOTECH LTD Code: BL/Y/57 TO 59

Reference : REF No. 01-13 DTD. 18.01.2013 No. of Samples : THREE (3)

Received on : DTD. 18.01.2013 Total Pages : 1 OF 1

Date of performance of Test : 22.01.2013 TO 31.01.2013 Despatched on :

TEST RESULTS

SAMPLE NO.	BL/Y/57	BL/Y/58	BL/Y/59
SAMPLE MARK	Hydrostat Liquid	Rosil ASRW Liquid	Untreated
	BABY CONES YARN SAMPLES		

INVESTIGATION : STATIC CHARGE ESTIMATION

TEST METHOD NO. : ASTM D : 4238–95

Charging Voltage : 10 KV Relative Humidity : 45 ± 5%

Sample Distance : 15 mm Temperature : 25 ± 2°C

Sample Conditioning : At 45% RH for One Week

RESULTS

SR. NO	SAMPLE DETAILS	TOTAL CHARGE DEVELOPED (Volts)	HALF DECAY TIME (secs)
1	BL/Y/57 (Hydrostat Liquid)	1770, 2101, 1804, 1383 Avg. 1/15 = 1720	7.8, 6.4, 5.4, 5.0 Avg. 6.15
2	BL/Y/58 (Rosil ASRW Liquid)	1383, 553, 1106, 1770 Avg. 1203 = 1200	4.2, 2.8, 3.6, 5.0 Avg. 3.9
3	BL/Y/59 (Untreated)	1825, 1770, 2101, 2323 Avg. 2005 = 2010	88, 30, 124, 12 Avg. 63.5

btra

[M.K.K Kaimal]
Laboratory Manager
BTRA Test Laboratories

01.02.2013

Note : *BTRA TEST Laboratories is assured 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.
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AVAIL SERVICES OF BTRA FOR TOTAL SOLUTIONS.

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

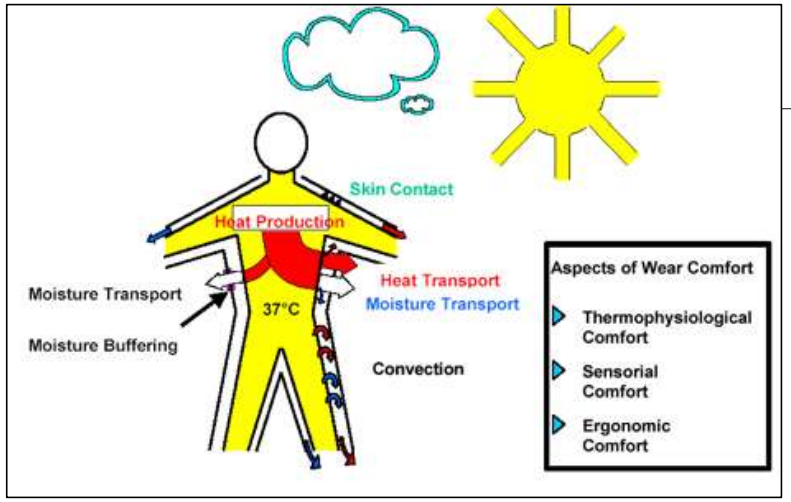
Sample details	Untreated	Rosil ASRW Liquid
Total charge developed (volts)	2010	1200
Half decay time (seconds)	63.5	3.9

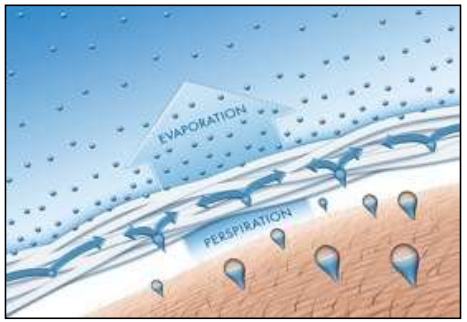
Instrument: Static Honestometer
Charging volts : 10 KV
Sample Distance : 15mm

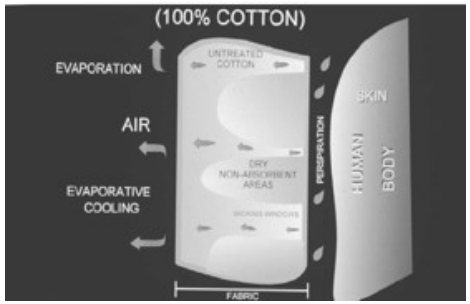
Relative Humidity : 45 ± 5%
Temperature : 27 ± 2^{o}C

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 for M&S

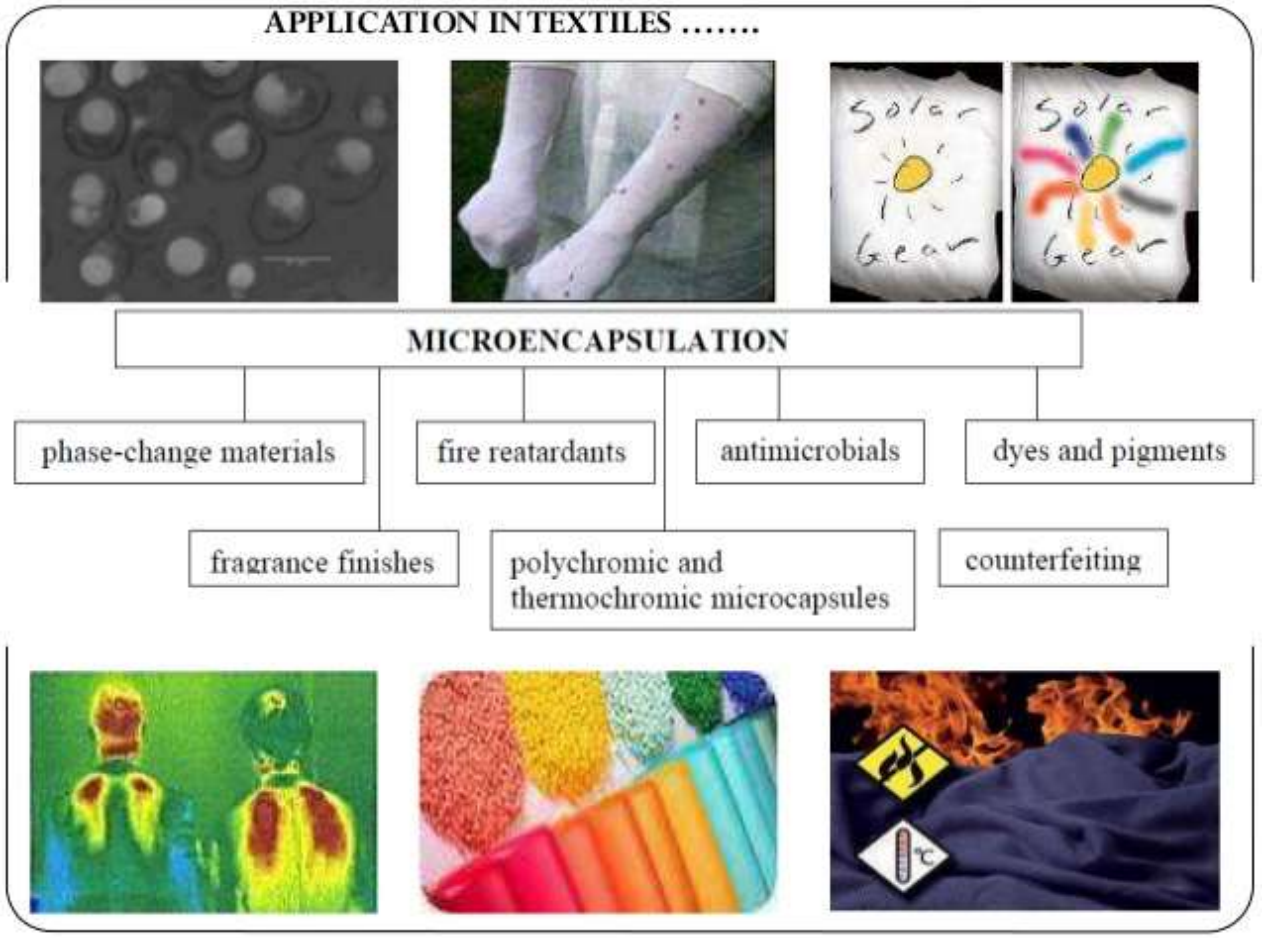
1. Wicking
P136B
Vertical rise in mm after 3 minutes

	(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%

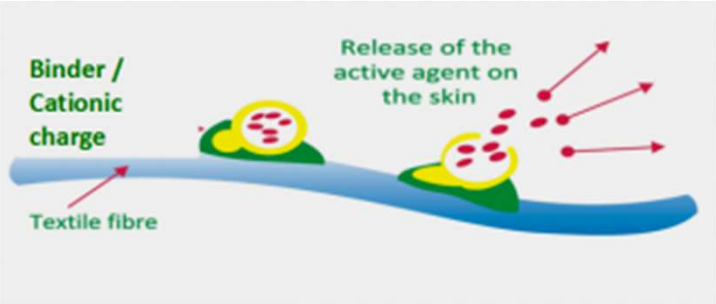
Microencapsulation Technology

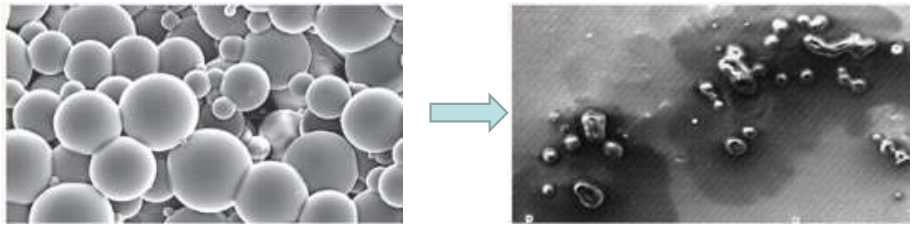


Microencapsulation Technology

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!!**

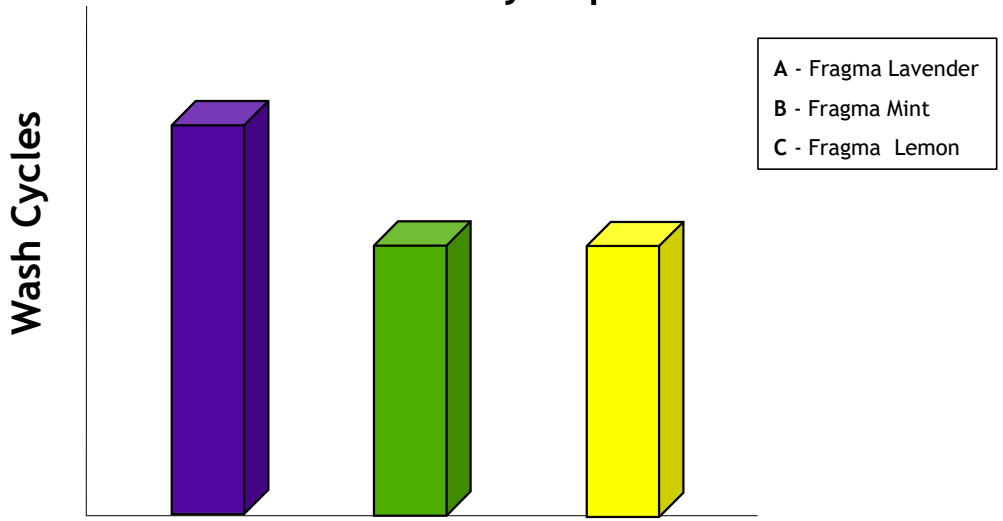
Encapsulated Aromatic Emulsions For Textiles

- ✓ 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!!**

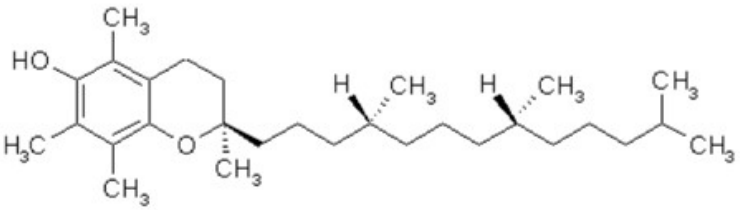
Aloe Vera Finish Benefits

- ❖ 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!!**

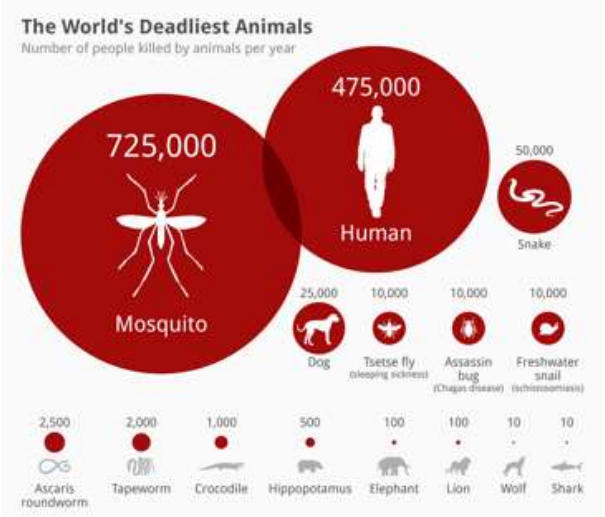
- Demand For Functional Finishes Has Been Increasing Rapidly In Textile
- Vitamin E Plays A Major Role In Influencing The Human Health
- Protect The Functioning Of Cells And The Intracellular Processes
- Also Has Anti-oxidant Property
- Application With Microencapsulation Technology Is Possible



- ❖ 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

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

New Sustainable Products…

- Saving Up To 5 Hours In Reactive Dyeing… → Rosa Black M
- Reactive Dyes Washing Off At 70°C… → Greenwash EC
- Cotton Bleaching At 70°C… → Mintbleach

C O M I N G S O O N

Q & A Session

For Any Queries , Pl Contact :

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