Functional Solutions for Kaiqi Textile
TASTEX Active Functional Finishing
TASTEX is produced in "CLEAN ROOM". The same standard as cosmetics.

TASTEX is formulated just the same as the real cosmetic!!
Multi-layer structure of TASTEX

Vesicle structure

- **Water phase**: (Collagen Peptide, silk protein, xylitol)
- **Oil phase**: (e.g. Squalene)
TASTEX® Skin Care Finishing

- TASTEX® ALS
  - Aloe Vera

- TASTEX® SKU
  - Collagen

- TASTEX® SSU
  - Silk Protein

- TASTEX® CRM
  - Ceramide

- TASTEX® Hyalu
  - Hyaluronic acid

- TASTEX® MGU
  - Natural Anti-microbial

- TASTEX® COOL-EX
  - Xylitol Cool Sensation

- TASTEX® HOT 2
  - Warm Sensation

- TASTEX® TG0031
  - Vitamin A

- TASTEX® Sakura
  - Cherry blossoms extract
Hyalu Moisturising

TASTEX HYALU
Moistuising

- Hyluronic acid is used in many pharmaceutical and cosmetic products for intensive moisturizing effects
- 1 gm Hyluronic acid can hold up to 6 litres of water
- Proven to dramatically hydrate the skin
- Active ingredients:
  - Hyaluronic Acid
  - Squalane
  - Cologen
  - Undecynol monoglyceride (natural anti microbial)
- Can be applied by pad or exhaust on any fiber
**Actual Test Results**

**Skin moisture content changing rate**

Material: Acryl/Polyamide/Wool/Polyurethan

Test chamber condition: Temperature/Humidity 22°C/45%

Test Chamber condition: temp. 22°C, humidity 45%
Conditioning 30 minutes
To put treated material (5% TASTEX HYALU) and untreated on arm.
To measure moisture changing rate by SKICON-200.

<table>
<thead>
<tr>
<th>Time (min)</th>
<th>1) without finish</th>
<th>2) TASTEX HYALU</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>196%</td>
<td>213%</td>
</tr>
<tr>
<td>60</td>
<td>206%</td>
<td>310%</td>
</tr>
</tbody>
</table>

**Change of moisture content**

![Graph showing moisture content change over time](image)
Cool Sensation

TASTEX COOL-EX
TASTEX COOL-EXS
When garment contains Xylitol, it will absorb moisture of sweat and shows endothermic reaction. Hence, the ambient temperature will drop.

Thus gives COOL sensation to skin. Finishing with such property called COOL finishing.

Active ingredients:

- Xylitol
- Squalane
- Silk Protein
- Undecynol monoglyceride
Thermographic Proofs – Before Exercise

Left part is TASTEX Cool-EX treated, right part is untreated.

Before exercise.

Temp of measure points:
Left
#1: 32.18
#2: 32.07
Right
#3: 32.79
#4: 32.51
Left part is TASTEX Cool-EX treated, right part is untreated.

After hard exercise.

Temp of measure points:
Left
#1: 29.61
#2: 29.89
Right
#3: 32.51
#4: 32.79
Avg. ΔT: 2.9°C
Left part is TASTEX Cool-EX treated, right part is untreated.

Takeoff the shirt.

Temp of measure points:
Left
#1: 31.18
#2: 31.66
Right
#3: 34.21
#4: 33.73

Avg. ΔT: 2.55C
Very Cool Xylitol-impregnated Very Cool Sportswear absorbs the heat of perspiration. No matter what the ambient temperature, Very Cool Polo Shirts lower body heat 3 degrees for cooler play. Very Cool Polo Shirts also filter ultraviolet and infrared radiation, intercepting ultraviolet radiation and infrared radiation to minimize heat build-up in
The active ingredient of TASTEX® MGU is Undecynol monoglyceride which is a natural anti-microbial agent and can be found in human’s perspiration gland.

It is natural purifying substance and very gentle to skin.

The effectiveness of TASTEX® MGU has been proven by following tests:

• AATCC 100-2004, Staphylococcus Aureus
• ISO 20743: 2007, Quantitative Method
• ASTM E 2149-2001
• JISL 1902-2002
• FX-T-73023-2006 Staphulococcus A., E. coli, albicans Saccharomyces
The active ingredient of TASTEX MGU is Undecynol monoglyceride, the official INCI name is "Glyceryl undecylenate" (CAS no. 62285-15-8). INCI stands for International Nomenclature of Cosmetic Ingredients.

The application/usage of all ICNI ingredients can be found in the website. For example, you can find glyceryl undecylenate in following page: http://www.cosdna.com/eng/ec23d610348.html

Glyceryl Undecylenate is a natural preservative certificate by ECOCERT.

The safety information of glyceryl undecylenate can be found from below website: http://www.cosmeticsinfo.org/index.php
### Anti-microbial Test Results

<table>
<thead>
<tr>
<th>Material</th>
<th>TASTEX MGU</th>
<th>Method</th>
<th>Activity Value of Bacteriostat (initial)</th>
<th>Activity Value of Bacteriostat (after washing)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cotton towel</td>
<td>10 g/l</td>
<td>Padding</td>
<td>6.2</td>
<td>&gt;6.1 (20 times)</td>
</tr>
<tr>
<td>Cotton knit</td>
<td>1.0 %</td>
<td>Exhaustion</td>
<td>4.3</td>
<td>4.8 (20 times)</td>
</tr>
<tr>
<td>Nylon</td>
<td>1.0%</td>
<td>Exhaustion</td>
<td>&gt;6.2</td>
<td>4.6 (20 times)</td>
</tr>
<tr>
<td>PAC/Wool (70/30)</td>
<td>2.0%</td>
<td>Exhaustion</td>
<td>2.5</td>
<td>3.5 (20 times)</td>
</tr>
</tbody>
</table>
TEST RESULTS

ANTIBACTERIAL ACTIVITY: AATCC 100:2004

<table>
<thead>
<tr>
<th>Results</th>
<th>After incubation (37°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact Time (&quot;0&quot; h Contact time)</td>
<td>1h 6h 18h 24h\textsuperscript{11}</td>
</tr>
<tr>
<td>3.07 log cfu/sample</td>
<td>-</td>
</tr>
<tr>
<td>1.3 x 10⁷ cfu/ml</td>
<td>-</td>
</tr>
</tbody>
</table>

\textsuperscript{11} No bacteria growth was observed after 24 hour.

<table>
<thead>
<tr>
<th>Bactericidal activity</th>
<th>Result</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduction (%) for 24h</td>
<td>% 99.9 Effective</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Initial Count</th>
<th>1.9 x 10⁷ cfu/ml</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microorganism</td>
<td>Staphylococcus aureus ATCC 6538 (Gram+)</td>
</tr>
<tr>
<td>Size of Sample</td>
<td>Circular, Ø 48mm</td>
</tr>
<tr>
<td>Number of washing</td>
<td>-</td>
</tr>
<tr>
<td>Washing method</td>
<td>-</td>
</tr>
<tr>
<td>Incubation time, °C</td>
<td>48h, 37°C</td>
</tr>
</tbody>
</table>

Total uncertainty: \(U(\% 100) = U(\% 0.1) = 0.042\)

\[ R: ( B-A)/BX100 \]

**Remark**: cfu: colony forming unit.
Hyaluronic acid has been used as cosmetics, and some pharmaceutical products

As pharmaceutical products.
Mouthwash, eyewash

As medical supplies
Joint function improving agent
Adjuvant to ophthalmic surgery
Ophthalmic solutions
BAYSSENT®
CosmertoTextiles
INTRODUCTION

BAYSSENT® is the innovative and up-market product line of special cosmetotextile finishes by TANATEX Chemicals.

The finishes are based on micro-encapsulated essential oils, which on release reinforce harmony and wellbeing of body, mind and spirit.

The capsules release the beneficial essences gradually to ensure maximum effect of the special properties.

The product line consists of Scenting products, Aromawellness products, Skin-care products and Specialties.
TECHNICAL DETAILS

The essential oils are enclosed in small shells called microcapsules, realized in a special polyurethane resin and largely impermeable to diffusion. Our special way of encapsulation enables a bounding capacity with the fibre, which can even be enhanced by using BAYPRET® NANO-PU as additional binder. Wash durability is then between 10 (scenting range) up to 30 (skin-care range) washes.

Thanks to this novel technology, these microcapsules can protect the natural oils from the strong industrial strain of fabrics during the normal standard textile finishing process.

Our daily movements let the small microcapsule shells break and release the beneficial essences on our skin and our mind.
Close-up of micro-capsules bound to fibre
How we produce our micro-capsules

Starting point: \( H_2O \)

Add oil & active ingredients and component 1 of capsule wall

Mix strongly & disperse oil into micro-droplets

Add component 2 of capsule wall

2 components react & form capsule wall around droplets, result is a micro-capsule slurry
BAYSSENT® Lavender

The scent of Lavender is often used in cosmetics, such as soap and perfume. The fragrant, pale purple flowers and flower buds are also used in potpourris. Dried and often sealed in pouches, they are placed among stored items of clothing to give a fresh fragrance and to deter moths.

It is soothing, it aids sleep and relaxation.

Example

Towels
Bedcovers
BAYSCENT® Limone

Lemons are used since ancient times. From a healthy and nutritional ingredient for food preparations, to cleaning and anti-bacterial purposes and as a natural deodorizer.

It neutralizes smells and gives an refreshing scent in its place. Its scent is said to enhance mood.

Example
- Socks
- Bathroom Rugs
BAYSCENT® Rose

The rose is traditionally known as the queen of all flowers, which is represented by its appealing and alluring scent.

The rose is the number one fragrance used for perfumes, as it’s sweet but not too overpowering.

Its scent is said to soothe negative emotions and can reinforce memory.

Example
Leisurewear
Handkerchiefs
Rugs
BAYSCENT® Strawberry

The sweet but delicate scent of strawberries awakens positive associations to all good things in life: summertime, sun and indulging in the food of love. The odor provides a quick delight to our sense, soothes and balances body and mind.

*Example*

*Beachwear*

*Underwear*
BAYSCENT® Vanilla Bouquet

Vanilla is a very dominant, thus popular ingredient in high-end perfumes. Many associate the smell of vanilla, its comforting milky warmth, with pleasant childhood memories.

Vanilla is associated not only with warmth, softness and caring, but also has connotations of purity and simplicity.

Example

Children's wear
Nightwear
BAYSCENT®
AROMA WELLNESS
BAYSCENT® ACAI

Acai is the black-purple berrylike fruit of a palm specie originating from Brazil. Acai is notorious for its antioxidants, containing Vitamins A, C and E that boost your body's defence system.

It is rich in energy giving protein and recommended as a promoter of weight loss. Last but not least, it is said to have a positive effect on one’s love life.

Example
Underwear
Sportswear
BAYSCENT® ACE

Vitamin A is an anti-oxidant which protects the body against free radicals and enhances the immune system.

Vitamin C is an essential ingredient for maintaining a healthy and functioning body. It protects you against toxic minerals.

Vitamin E is essential to keep the body feeling and looking young.

Example

Make-up pads
Towels
Mattrasses
BAYSCENT® Aloe Vera

The Aloe Vera plant is rich in various components and has a multitude of effects. It will moisturize the skin, restores its natural balance and is anti-aging.

It is also anti-inflammatory and can relieve muscle pains. The essential oil is used with all active ingredients, unlike water based products on the market.

Example

Gloves
Hosiery
BAYSCENT® Body Lotion

This is a special blend of aroma’s from lotion, rose, jasmine, fresh flowers combined with the properties of Ylang-Ylang.

It will reinforce the natural balance between body and mind.

Additionally it will revive the skin through moisturizing.

Example

Hosiery

Tissues
BAYSCENT® Coffee

The caffeine has a stimulating and energizing effect on body and mind.
The antioxidants prevent free radicals to cause cell damage and positively affect attention, memory and physical performance.

It also decreases heart and liver diseases and increases muscle recovery.

Example
Hosiery
Underwear
BAYSCENT® Camomile

Camomile is an extract from the flower chamomile and famous for its herbal effects of increasing the volume of the blood flood and its moisturizing effect. It has an antimicrobial effect and Ultra-Violet absorption property (UV-cut effect). The camomile odor keeps everything smelling like fresh laundry.

Example
Swimwear
Headwear
BAYSCENT® Fleur de Lavande

The properties of the Lavender flower are numerous and well-known since ancient times.

The essence obtained by distillation of the flowers is anti-septic, analgesic and anti-inflammatory.

It’s also used for its relaxing, calmative, sedative and lenitive quality.

Example
Bathrobes
Nightwear
BAYSCENT® Ginseng

The ginseng plant is the most famous natural product with vitalizing properties.

It is rich in various components which relieve stress and muscle pains.

It is invigorating and restores the natural immune system.

Example

Matrasses
Socks
BAYSCENT® Green Tea

The natural anti-oxidants, minerals and vitamins ensure that regular green tea drinkers have lower chances of heart disease and developing certain types of cancer. It also controls the cholesterol level and blood pressure.

The green tea extract has been shown to be useful for "obesity management", since it induces thermogenesis and stimulates fat oxidation.

It refreshes your mind, lifts your spirit and improves your overall wellbeing.

Example

Sportswear
Sleepwear
BAYSCENT® Orange Tea

Orange Tea prevents and reverses artery clogging, its anti-oxidants stop free radicals, which cause cell damage.

It lessens inflammation, treats diseases such as pneumonia, cystitis and skin infections, it helps alleviate respiratory diseases.

Example
Bed Linen
Carpet
Vanilla is a very dominant, thus popular ingredient in high-end perfumes. Many associate the smell of vanilla, its comforting milky warmth, with pleasant childhood memories. Vanilla is associated not only with warmth, softness and caring, but also has connotations of purity and simplicity.
BAYSCENT® Argan Oil

Contains extreme levels of Vitamin E and fatty acids which offer skin-protection benefits. Cools and soothes inflammation and reduces wrinkles by restoring the skin’s hydro-lipid layer.

It helps soothe skin ailments such as acne, eczema and psoriasis and stretch marks during pregnancy. It stimulates circulation and strengthens the body’s natural immunity.

Example
Maternity clothes
Bathrobes
BAYSCENT® NEUTRALIZER

This specialty finish eliminates bad and unwanted odors. Even under extreme circumstances the fabrics remain fresh and render a pleasant smell.

It is perfect for sports- and work wear or intensively used carpets: it helps to keep things as neutral as possible.

Example
Carpet
Mattresses
Gym bags