SUN CARE TREND 2021
SUNSCREEN BEYOND UV PROTECTION

INNOVATION | GROWTH | EFFICIENCY
SUSTAINABILITY IS KEY
SUSTAINABILITY IS KEY
CONSUMERS WANT MORE ACTION FROM BRANDS ON SUSTAINABILITY

In the UK
79%
of adults feel personal care and beauty brands need to put more effort into ethical and sustainable product production

In China
68%
of adults want brands and companies to support environmental sustainability; 42% want more production and product information

In the US
34%
of 18-24 year olds look for brands that have sustainability strategies in place

KEY WORDS LIKE:
- SUSTAINABILITY
- MINERAL
- SAFETY
- BIODEGRADABLE
- GREEN
- NATURAL
- CLEAN
- OCEAN-FRIENDLY
- BEAUTY
- VEGAN
- ECO-CONSCIOUS

TRENDING ACROSS THE GLOBE

Base: UK: 2,029 adults; China: 3,000 internet users aged 20-49; US: 187 internet users aged 18-24 who purchase clean, natural or organic personal care products
Source: Bloomberg; KuRunData/Mintel; Lightspeed/Mintel
THE RISE OF MINERALS

MINERAL INGREDIENTS CONTINUE TO RISE AND ALIGN WITH NATURAL/SAFETY CONCERNS

- There is an increasing demand for natural, eco and ‘safe’ sunscreen, hence the rise in mineral ingredients e.g. titanium dioxide and zinc oxide
- Synthetic ingredients are seen to have a significant decrease
- The competition within the mineral sunscreen market is keen; brands and formulators should build a better story around ingredients and benefits to both people and the planet

APAC: SUNSCREEN LAUNCHES BY SELECTED CHEMICAL AND MINERAL INGREDIENTS, 2015-16 VS 2019-20

Source: Mintel GNPD
THE RISE OF MINERALS
ORGANIC SUNSCREEN INGREDIENTS DECLINE AS MINERAL ONES RISE/REMAIN STEADY

- Chemical/organic sunscreen ingredients (i.e. octinoxate and oxybenzone) are on the decline in the Americas

- Even the established chemical sunscreen ingredient octocrylene (commonly combined with avobenzone to improve stability and provide a high level of UVA protection) has started to decline, and is banned in the US Virgin Islands (in addition to oxybenzone and octinoxate)

- In contrast, established mineral options show steady NPD activity

**AMERICAS: SUNSCREEN LAUNCHES BY SELECT CHEMICAL AND MINERAL INGREDIENTS, 2015-16 VS 2019-2020**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Octocrylene</td>
<td>65%</td>
<td>60%</td>
</tr>
<tr>
<td>Oxybenzone</td>
<td>43%</td>
<td>21%</td>
</tr>
<tr>
<td>Octinoxate</td>
<td>31%</td>
<td>16%</td>
</tr>
<tr>
<td>Zinc oxide</td>
<td>19%</td>
<td>26%</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>31%</td>
<td>28%</td>
</tr>
</tbody>
</table>

Source: Mintel GNPD
MARKETING SAMPLES
HIGH SPF FORMULATIONS ARE POSSIBLE BUT OFTEN A SENSORIAL CHALLENGE

SEVENTY-ONE ECO SUN SHIELD SPF 50+

PRODUCT BENEFIT CLAIMS

▪ provides an SPF 50+
▪ very high protection against UVA and UVB rays
▪ protects from salt, delivering hydration to take beach life to another level
▪ very water resistant and non stinging
▪ contains 100% mineral filters and natural active ingredients
▪ dermatologically tested
▪ manufactured by a company that donates 1% for the planet and retails in a 50ml eco pack.

PRODUCT INGREDIENTS

aqua (water), caprylic/capric triglyceride, zinc oxide, Helianthus annuus (sunflower) seed oil, Titanium dioxide, undecane, glycerin, Zea mays (corn) starch, tridecane, Cera alba (beeswax), polyglyceryl-3 diisostearate, Simmondsia chinensis (jojoba) seed oil, polyhydroxystearic acid, C10-18 triglycerides, parfum (fragrance), stearic acid, magnesium sulfate, palmitic acid, polyglyceryl-2 dipolyhydroxystearate, sodium chloride, alumina, sodium benzoate, citric acid, sodium hydroxide, xanthan gum, potassium sorbate, tocopherol, linalool, coumarin, beta-sitosterol, squalene, geraniol
OUR SOLUTIONS
BENTONE HYDROCLAY™ 2100

A NATURAL FOR VERSATILE FORMULATING

- Light and luxurious skin feel
- Creates flawless looking skin
  - Soft-focus effect
  - Mattifying
  - Moisture retention
- Formulation versatility
  - Cold processable
  - Synergistic with other thickeners
- Provides stability and suspension to low viscosity formulas
  - Heat stability
  - Reduced syneresis

APPLICATION AREAS

- Mineral sun care
- Organic sun care
- Daily wear with SPF
- Color cosmetic with SPF

*Mineral sunscreen formula available soon
**DRY TOUCH MINERAL SUNSCREEN**

**A NATURAL MINERAL FORMULA WITH BENTONE® LUXE XO AND HIGH OIL PHASE**

S-2012-02

<table>
<thead>
<tr>
<th>Phase</th>
<th>Ingredient</th>
<th>Supplier</th>
<th>%w/w</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Dicapryl Carbonate (Cetiol CC)</td>
<td>BASF</td>
<td>20.00</td>
</tr>
<tr>
<td></td>
<td>Isoamyl Laurate (Jolee 7750)</td>
<td>Oleon</td>
<td>15.00</td>
</tr>
<tr>
<td>B</td>
<td>Zinc Oxide (and) Triethoxycaprylylsilane (Z-Cote HP-1)</td>
<td>BASF</td>
<td>15.00</td>
</tr>
<tr>
<td></td>
<td>Titanium Dioxide (and) Silica (and) Dimethicone (Parisol TX)</td>
<td>DSM</td>
<td>7.5</td>
</tr>
<tr>
<td>C</td>
<td>C13-15 Alkane (and) Polyglyceryl-3 Polyrincioleate (and) Distearidimonium</td>
<td>Elementis</td>
<td>10.00</td>
</tr>
<tr>
<td></td>
<td>Hectorite (BENTONE® LUXE XO)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>Deionized Water</td>
<td></td>
<td>30.00</td>
</tr>
<tr>
<td></td>
<td>Propandiol</td>
<td></td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Dehydroacetic Acid (and) Benzyl Alcohol (Geogard 221)</td>
<td>Lonza</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Sodium Chloride</td>
<td></td>
<td>0.50</td>
</tr>
</tbody>
</table>

**BENEFITS**

Predicted SPF 25.8, PA +++

High Oil Content utilizing particle suspension in combination with outstanding stabilizing power of BENTONE® LUXE XO to provide a low viscosity lotion.
HIGH SPF PERFORMANCE
HIGHER SPF PROTECTION
CONSUMERS SEEK SUPER-EFFECTIVE SHIELDING FROM SUN DAMAGE AND SKIN CANCER

MARKET INSIGHTS

- People’s awareness on skin protection is higher and they seek more effective protection from sun damage and skin cancer.
- The level of SPF protection is on the rise, especially in Asian market.
- In China, 52% of facial sunscreen users are concerned that products offer poor protection.
- There is a huge market for NPD in this area to address consumer’s concern.

APAC: SHARE OF SUNCARE LAUNCHES WITH SPF OVER 39 RISES

Source: Mintel GNPD
HIGHER SPF PROTECTION
CONSUMERS SEEK SUPER-EFFECTIVE SHIELDING FROM SUN DAMAGE AND SKIN CANCER

MARKET INSIGHTS

- People’s awareness on skin protection is higher and they seek more effective protection from sun damage and skin cancer.
- The demand of higher SPF protection is on the rise, especially in Latin America.
- There is a huge market for NPD in this area to address consumer’s concern.

Source: Mintel GNPD
MARKETING CASE

SHISEIDO ANESSA PERFECT UV SUNSCREEN MILD MILK FOR SENSITIVE SKIN

PERFECT UV SUNSCREEN MILD MILK FOR SENSITIVE SKIN SPF 50+ PA++++

PRODUCT BENEFIT CLAIMS

- provides an SPF 50+ PA++++
- Powered by heat, water and sweat
- UV protection
- Brightening / illuminating
- For sensitive skin
- Free from added/artificial colourings
- hypoallergenic
- Mineral oil/petroleum free
- No additives/preservatives
- Non-comedogenic
- Paraben free
- Waterproof

PRODUCT INGREDIENTS

methyl methacrylate crosspolymer, diisopropyl sebacate, dimethicone, water, caprylyl methicone, zinc oxide, cetyl ethylhexanoate, titanium dioxide, pentaerythrityl tetraethylhexanoate, triethylhexanoin, butylene glycol, diethylhexyl succinate, polymethylsilsesquioxane, glycerin, silica, bis-butyldimethicone polyglyceryl-3, PEG-9 polydimethylsiloxyl ethyl dimethicone, diethylamino hydroxybenzoyl hexyl benzoate, trimethylsiloxysilicate, bis-ethylhexyloxyphenol methoxyphephenyl triazine, PEG/PPG-14/7 dimethyl ether, sodium chloride, Paeonia albiflora root extract, dipotassium glycyrrhizate, sodium acetylated hyaluronate, PEG-10 dimethicone, aluminum hydroxide, stearic acid, dextrin palmitate, ethylhexyl triazone, disteardimonium hectorite, hydrogen dimethicone, citric acid, sodium citrate, talc, sodium metabisulfite, tocopherol, benzoic acid
OUR SOLUTION
BENTONE® LUXE XO

A MULTIFUNCTIONAL GEL FOR VERSATILE FORMULATING

- Providing SPF boosting effect to reach highest SPF
- Caring and luxurious sensory
  - Water-release effect with hydrating sensation
  - Rich yet velvety skin feel

- Providing more stability to all W/O systems
  - Stabilize high oil system
  - Improve freeze thaw stability for high water system

- Formulation versatility
  - From very high oil to very high water
  - Cold processable

APPLICATION AREAS

- Mineral sun care
- Organic sun care
- Daily wear with SPF
- Color cosmetic with SPF
HYBRID SUN LOTION
SPF BOOSTER

S-2015-02

<table>
<thead>
<tr>
<th>Phase</th>
<th>Ingredient</th>
<th>Supplier</th>
<th>% w/w</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Caprylic/Capric Triglyceride (Palmester 3575)</td>
<td>KLK Oleon</td>
<td>19.50</td>
</tr>
<tr>
<td></td>
<td>Octocrylene (Eusolex OCR)</td>
<td>Merck</td>
<td>10.00</td>
</tr>
<tr>
<td></td>
<td>Ethylhexyl Salicylate (Eusolex OS)</td>
<td>Merck</td>
<td>5.00</td>
</tr>
<tr>
<td></td>
<td>Ethylhexyl Methoxycinnamate (Eusolex 2292)</td>
<td>Merck</td>
<td>3.00</td>
</tr>
<tr>
<td>B</td>
<td>Zinc Oxide (and) Triethoxycaprylsilane (Z-Cote HP-1)</td>
<td>BASF</td>
<td>25.00</td>
</tr>
<tr>
<td>C</td>
<td>C13-15 Alkane (and) Polyglyceryl-3 Polyrincinoleate (and)</td>
<td>Elementis</td>
<td>10.00</td>
</tr>
<tr>
<td></td>
<td>Disteardimonium Hectorite (BENTONE® LUXE XO)</td>
<td>BASF</td>
<td></td>
</tr>
</tbody>
</table>
| D     | Deionized Water                                                          | 25.00
|       | Propandiol                                                               | 1.00
|       | Dehydroacetic Acid (and) Benzyl Alcohol (Geogard 221)                    | Lonza            | 1.00  |
|       | Sodium Chloride                                                          | 0.50

BENEFITS

Stabilizing high amounts of organic UV filters, oils and minerals has never been easier. BENTONE® LUXE XO is a natural when formulating extreme levels of lipophilic ingredients, providing stability and sensory benefits. Particularly the combination with mineral UV filters allows for a pleasant powdery finish.
HYBRID SUN LOTION
IN-VITRO SPT TESTING WITH BENTONE® LUXE XO

In-Vitro SPF Testing

<table>
<thead>
<tr>
<th>Description</th>
<th>SPF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hybrid Sun Lotion no Clay</td>
<td>39.05</td>
</tr>
<tr>
<td>Hybrid Sun Lotion with BENTONE LUXE XO</td>
<td>63.38</td>
</tr>
</tbody>
</table>

Mean In-Vitro SPF
MULTI-FUNCTIONALITY ON TREND
MULTI-FUNCTIONAL SUNCARE/SKINCARE

CONSUMER LOOK FOR PRODUCTS THAT PROVIDE PROTECTION BEYOND UV

- There is a significant increase in products with protects against elements* claims
- There has been disruptive innovations that offer protection from jellyfish stings, blue light and pollution in American market in the last 12 months
- Innovative suncare products specially for hair / scalp has seen an increasing demand in the American market

Source: Mintel GNPD

AMERICAS: SUNSCREEN NPD WITH PROTECTS AGAINST ELEMENTS' CLAIMS BY REGION, 2015-16 VS 2019-2020

% of launches

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>North America (protects against elements)</td>
<td>10%</td>
<td>21%</td>
</tr>
<tr>
<td>Latin America (protects against elements)</td>
<td>1%</td>
<td>9%</td>
</tr>
</tbody>
</table>

Source: Mintel GNPD
MULTI-FUNCTIONAL SUNCARE/SKINCARE
SKINCARE CLAIMS ARE ON THE RISE

- As consumer become savvier today, they are seeking products that offer more than just sun protection
- Hybrid suncare/skincare innovations, especially those that tackle skin problems caused by traditional sunscreen e.g. acne are trending
- Skincare claims are prevalent across the globe. In APAC and the Americas sun care market, moisturization claims are on the highest demand, led by 61% and 48% of recent launches respectively

**APAC: SUNCARE LAUNCHES BY SELECT FAST-GROWING SKINCARE CLAIMS, 2015-16 VS 2019-20**

**Source:** Mintel GNPD
## MARKETING SAMPLES

**SUN CARE WITH UV AND BLUE LIGHT PROTECTION CLAIM**

### DERMALOGICA INVISIBLE PHYSICAL DEFENSE SPF 30

<table>
<thead>
<tr>
<th>PRODUCT BENEFIT CLAIMS</th>
<th>PRODUCT INGREDIENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ provide an SPF 30</td>
<td>active ingredients: zinc oxide (20%)</td>
</tr>
<tr>
<td>▪ Antioxidant</td>
<td>inactive ingredients: water (aqua), caprylic/capric triglyceride, C12-15 alkyl benzoate, dimethicone, butyloctyl salicylate, butylene glycol, glycerin, silica, polyhydroxystearic acid, PEG-10 dimethicone, Argania spinosa kernel oil, Cordyceps sinensis extract, trametes versicolor extract, sodium hyaluronate, Camellia sinensis leaf extract, Eucalyptus globulus leaf oil, Lavandula spica (lavender) flower oil, tocopheryl acetate, sodium chloride, stearalkonium hectorite, pentylene glycol, lauryl PEG-9 polydimethylsiloxethyl dimethicone, propanediol, dimethicone crosspolymer, sodium citrate, propylene carbonate, xanthan gum, caprylyl glycol, bisabolol, Lavandula hybrid oil, ethylhexyglycerin, sodium hydroxide, potassium sorbate, sodium benzoate</td>
</tr>
<tr>
<td>▪ For sensitive skin</td>
<td></td>
</tr>
<tr>
<td>▪ UV and blue light protection</td>
<td></td>
</tr>
<tr>
<td>▪ Ease of use</td>
<td></td>
</tr>
<tr>
<td>▪ Free from added/artificial colorings</td>
<td></td>
</tr>
<tr>
<td>▪ Gluten free</td>
<td></td>
</tr>
<tr>
<td>▪ Paraben free</td>
<td></td>
</tr>
<tr>
<td>▪ Reduce UV-induced redness and dryness</td>
<td></td>
</tr>
<tr>
<td>▪ Vegan</td>
<td></td>
</tr>
</tbody>
</table>
MARKETING SAMPLES
A MULTIFUNCTIONAL TINTED MOISTURIZER WITH UV PROTECTION

DOLCE & GABANNA ON-THE-GLOW TINTED MOISTURIZER SPF 30 PA+++

PRODUCT BENEFIT CLAIMS

- provide an SPF 30 PA+++
- Brightening / illuminating
- Ease of use
- Long-lasting
- Moisturizing / hydrating
- UV protection
- Quick application and effortless blending
- Natural ingredients

PRODUCT INGREDIENTS

- water, dimethicone, titanium dioxide, ethylhexyl methoxycinnamate, butylene glycol, propanediol, diethylhexyl succinate, glycerin, nylon-12, PEG-9 polydimethylsiloxy ethyl dimethicone, PEG-10 dimethicone, aluminum hydroxide, disiloxane, diphenylsiloxy phenyl trimethicone, disteardimonium hectorite, sorbitan sesquisostearate, stearic acid, phenoxyethanol, polymethylsilsesquioxane, dextrin, EDTA-3Na, dimethicone/vinyl dimethicone crosspolymer, Olea europaea (olive) fruit oil, figs fruit extract, polysilicone-2, talc, tocopheryl acetate, laureth-4, BHT, sodium metabisulfite, sodium hyaluronate, hydrogen dimethicone, tocopherol, iron oxides
OUR SOLUTIONS
BENTONE GEL® GTCC V

HIGH NATURAL INDEX BENTONE GEL®

- Providing highly efficient rheological control
  - Predictable, reproducible and stable viscosity control
  - Shear-thinning viscosity
  - Excellent suspension of pigments and actives

- A sustainable alternative to other thickeners
  - 95% Natural according to ISO 16128
  - Approved under RSPO Mass Balance system

- Formulation versatility
  - A high degree of formulating flexibility
  - Cold processable
  - Highly reproducible results for multi-site production requirements

APPLICATION AREAS

- Clean / Mineral sun care
- Organic sun care
- Natural daily wear with SPF
- Natural color cosmetics with SPF
DAILY SKIN DEFENSE LOTION
A NON-GREASY MINERAL SUNSCREEN SERUM

Enhanced Performance Through Applied Innovation

**S-2009-03**

<table>
<thead>
<tr>
<th>Phase</th>
<th>Ingredient</th>
<th>Supplier</th>
<th>%w/w</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Dicapryl Carbonate (Cetiol CC)</td>
<td>BASF</td>
<td>20.00</td>
</tr>
<tr>
<td></td>
<td>Dimethicone (KF 96L-2cs)</td>
<td>Shin Etsu</td>
<td>9.00</td>
</tr>
<tr>
<td></td>
<td>Caprylic/Capric Triglyceride (and) Stearalkonium Hectorite (and) Propylene Carbonate (BENTONE GEL® GTCC V)</td>
<td>Elementis</td>
<td>8.00</td>
</tr>
<tr>
<td></td>
<td>Cetyl PEG/PPG-10/1 Dimethicone (Abil EM 90)</td>
<td>Evonik</td>
<td>2.20</td>
</tr>
<tr>
<td></td>
<td>Polyglyceryl-2 Diisostearate (S-Face IS-202P)</td>
<td>Zeal</td>
<td>2.00</td>
</tr>
<tr>
<td>B</td>
<td>Zinc Oxide (and) Triethoxycaprylylsilane (Z-Cote HP-1)</td>
<td>BASF</td>
<td>10.00</td>
</tr>
<tr>
<td></td>
<td>Titanium Dioxide (and) Silica (and) Dimethicone (Parsol TX)</td>
<td>DSM</td>
<td>2.00</td>
</tr>
<tr>
<td>C</td>
<td>Deionized Water</td>
<td>To 100</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Butylene Glycol</td>
<td>3.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sodium Chloride</td>
<td>0.50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EDTA-2Na</td>
<td>0.02</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>phenoxyethanol (and) propanediol (and) propylene carbonate (and) caprylhydroxamic acid (and) o-cymen-5-ol (Optithen GP)</td>
<td>Ashland</td>
<td>0.80</td>
</tr>
</tbody>
</table>

**BENEFITS**

Predicted SPF 14

A light-weight watery sunscreen with good fluidity. BENTONE GEL® GTCC V helps to evenly suspend and distribute the inorganic sunscreen particles in the formula and on the skin as well, resulting in SPF boosting effect.
Thank You!