

# Safe Choice, Better Experience

## Biopolymers\_Starches in Sunscreen Products

### 生物聚合物-淀粉在防晒产品中

Henry PAN, Technical Sales Manager, China & SEA  
Surface Chemistry | Personal Care



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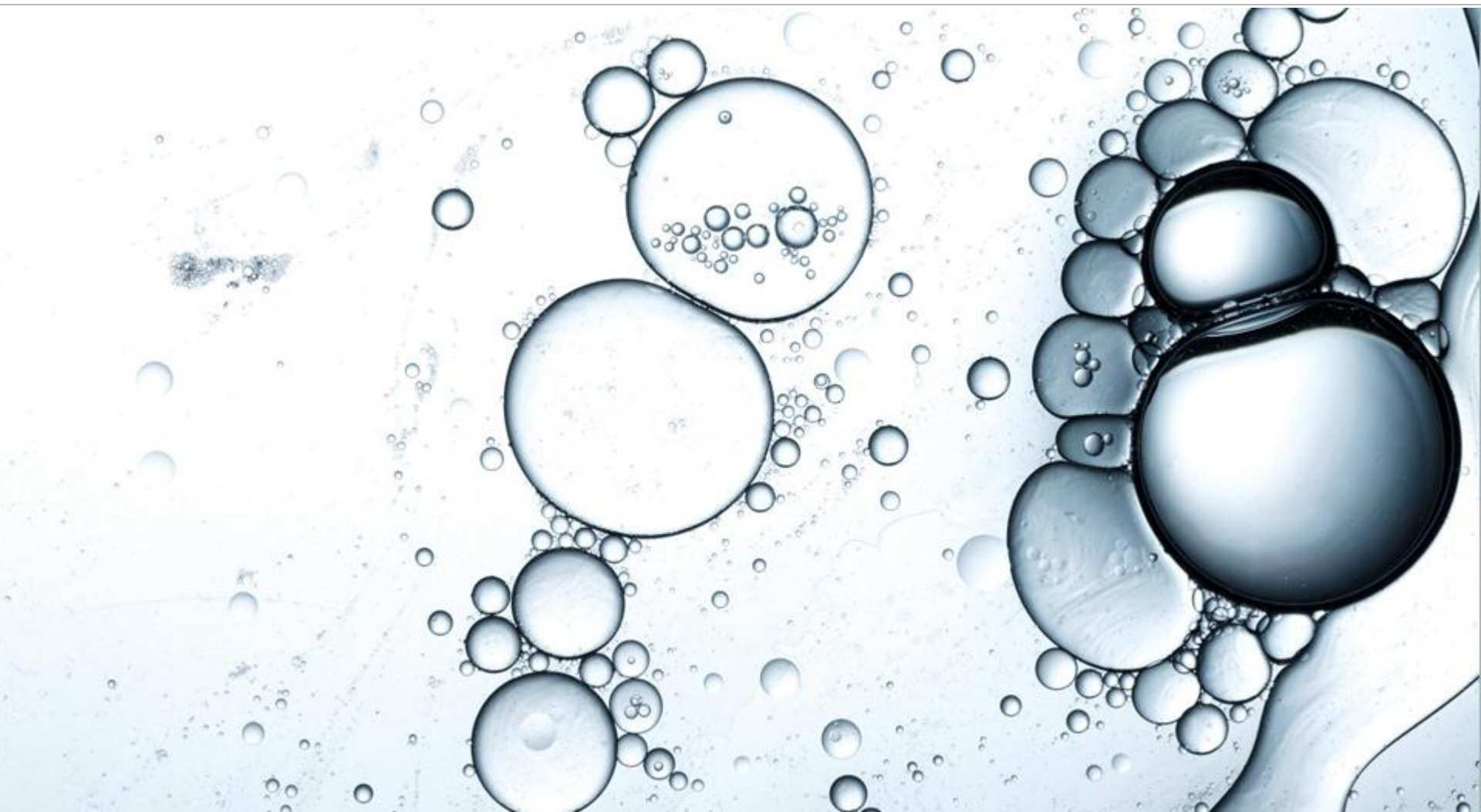
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# Sun Care Market Info 日光防护市场信息



## The FACT – Invisible Damage from SUN 事实 – 阳光的伤害

More than half of primary melanomas occur in areas of the skin often exposed to the sun.  
超过一半的原发性黑色素瘤发生在经常暴晒的部位。

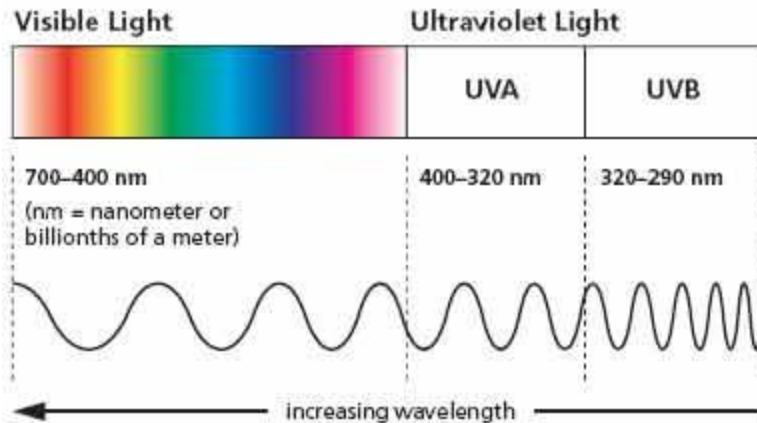
National Academy of Clinical Biochemistry Guidelines for the Use of Tumor Markers in Malignant Melanoma

Rishab K. Gupta<sup>1\*</sup>, Alistair J. Cochran<sup>2</sup>, Eddy C. Hsueh<sup>3</sup>, Steven D. Trocha<sup>4</sup>, Donald L. Morton<sup>1</sup>

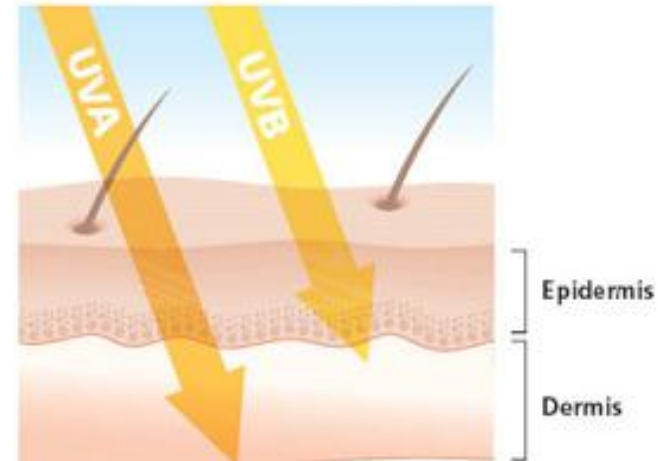
# The FACT – Invisible Damage from SUN

## 事实 – 阳光的伤害

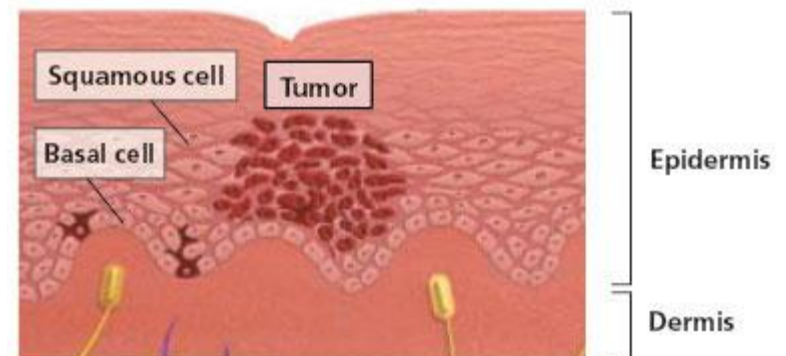
### Visible Light/UV



### UV Radiation and the Skin



### Normal Skin Cells and Tumor Cells



[www.skincancer.org](http://www.skincancer.org)



# “Regular Use of Sunscreen Can Reduce Melanoma Risk”

AkzoNobel

## 有规律的使用防晒产品能降低黑色素瘤的风险

Found in a randomized study that the use of sunscreen SPF 15 or higher, in a period of 5 years, in adults aged 25 to 75 years, reduced the incidence of new primary melanomas for up to 10 years after the end of the study.

在年龄25到75岁随机人群的研究发现持续5年的使用SPF15或更高的防晒剂，能降低新的原发性黑色素瘤的发生，并持续到研究后的10年中。

In addition, the protective effect was also evident in invasive melanomas, which showed a decrease of 73% in those patients who received sunscreen daily.

另外，对73%的重症黑色素瘤患者也表现出明显的保护作用。

Thus, the researchers concluded that melanoma can be prevented by regular use of sunscreen also in adults.

结论是防晒能防护黑色素瘤的产生。



**Adèle C. Green, MB, BS, PhD**

*Cancer and Population Studies Group Queensland Institute of Medical Research Brisbane, Queensland, Australia, and University of Manchester, Manchester, UK*

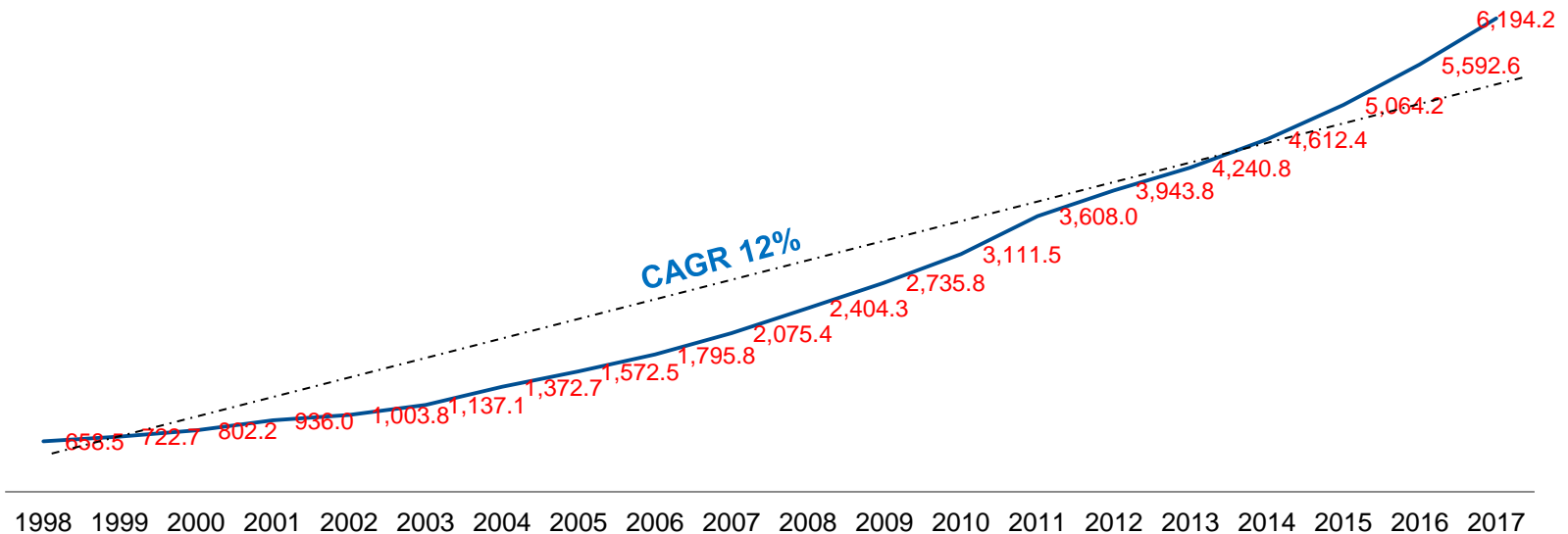
**Gail M. Williams, PhD**

*School of Population Health University of Queensland Queensland, Australia*

# Sun Care Sales in China

## 日光防护产品在中国的销售

### Sun Care Retail Value in China, RMB Million



Data source: Euromonitor

## Asia CAGR and Spend per Capita for Sun Care, 2011 亚洲市场的复合增长率和人均花费



\* Spend per capita is based on forecast. CAGR is based on local currency.

Fast growing markets such as Vietnam, China, India and Thailand remain limited by low spend per capita, despite the fact that China is the largest market in the region.

快速增长的市场有越南、中国、印度和泰国，但人均花费均比较低，尽管中国是最大的市场。



# Sunscreen Dominates Sales & NPD in Asia

## 防晒产品主导亚洲的日光防护市场和新品开发

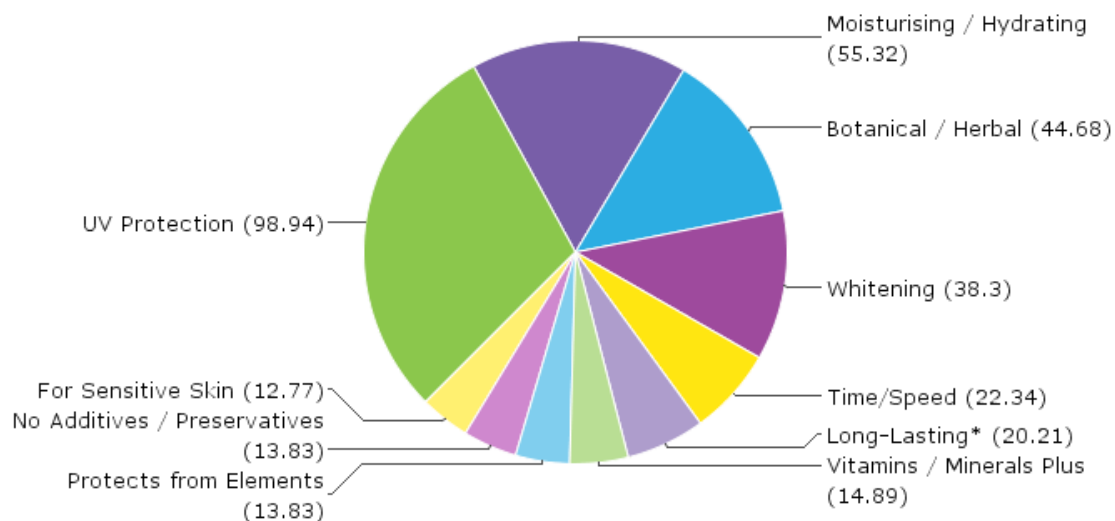


Sunscreen represents the bulk (78-94%) of sales of sun care in Asia Pacific, as well as in NPD (92%) with other segments much more limited. Japan and Australia saw the largest portion of sales coming from self-tanning products (10-14%), whereas Thailand had the highest proportion of sales from after-sun products (22%). 防晒占亚洲日光防护市场的78-94%，新品开发占92%。

# Sunscreen by Claims in China

## 中国市场防晒产品的宣称

Number of Variants (%) by Claims



Search for products  
where Country matches one or more of *Taiwan, Hong Kong, China*  
and Sub-Category matches *Sun - Sun Exposure*  
and Date Published matches *less than one year ago*  
94 new products have been found

Source: Mintel GNPD

# Market Dynamics & Insight: Claims growing towards Sophistication 市场宣称的演变

AkzoNobel

**From 2009 to 2010, the  
increase of Claims grew more  
than 4 X**

从2009年到2010年，宣称增加4倍以上

## 2009 Claims:

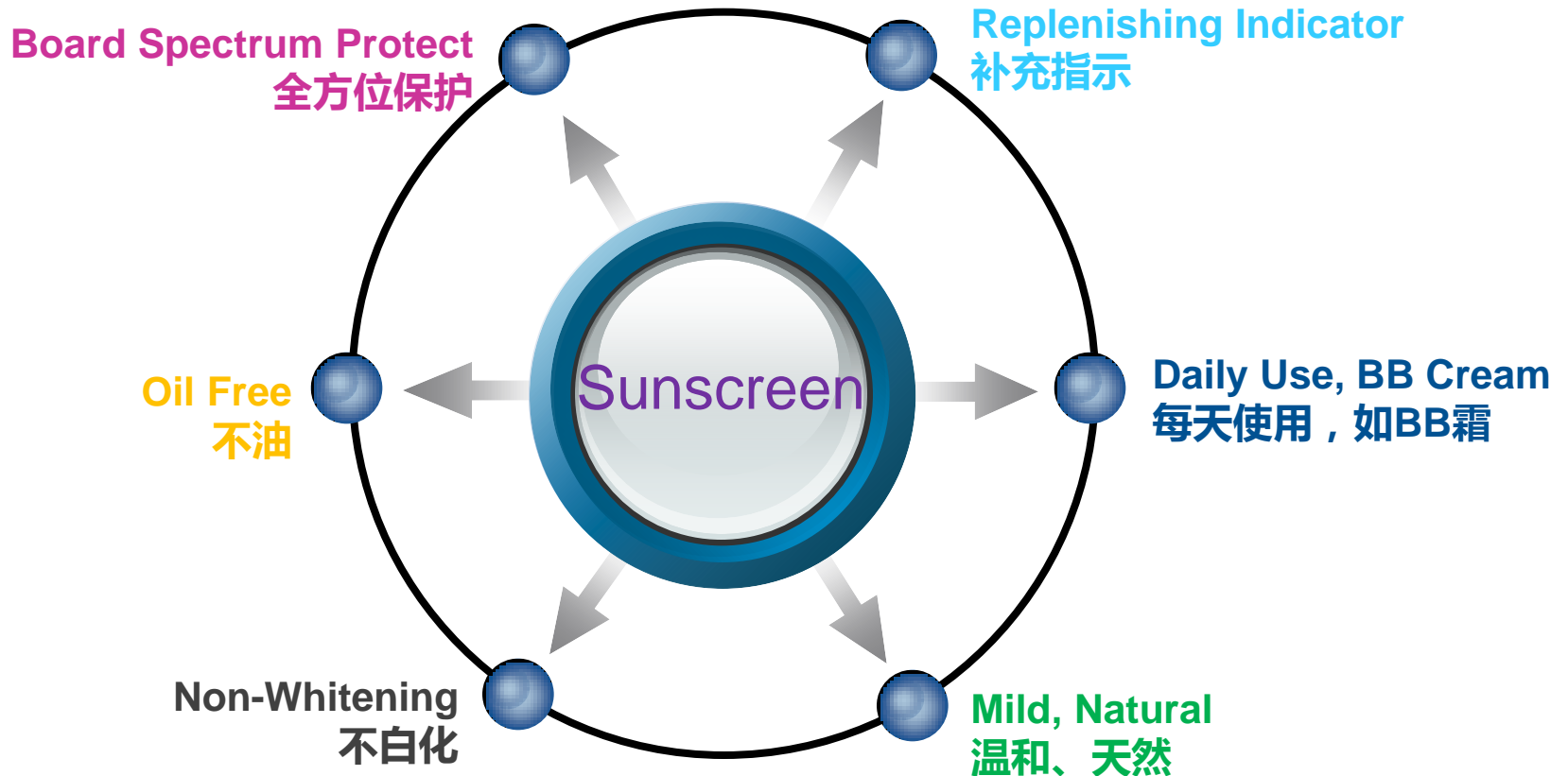
UV Protection  
Moisturizing/ Hydrating  
Botanical/Herbal  
Time/Speed  
Water Resistant  
Dermatologically Tested  
Antioxidant  
Vitamin/Minerals Fortified  
Non-Comedogenic  
Oil Free

## 2010 Claims:

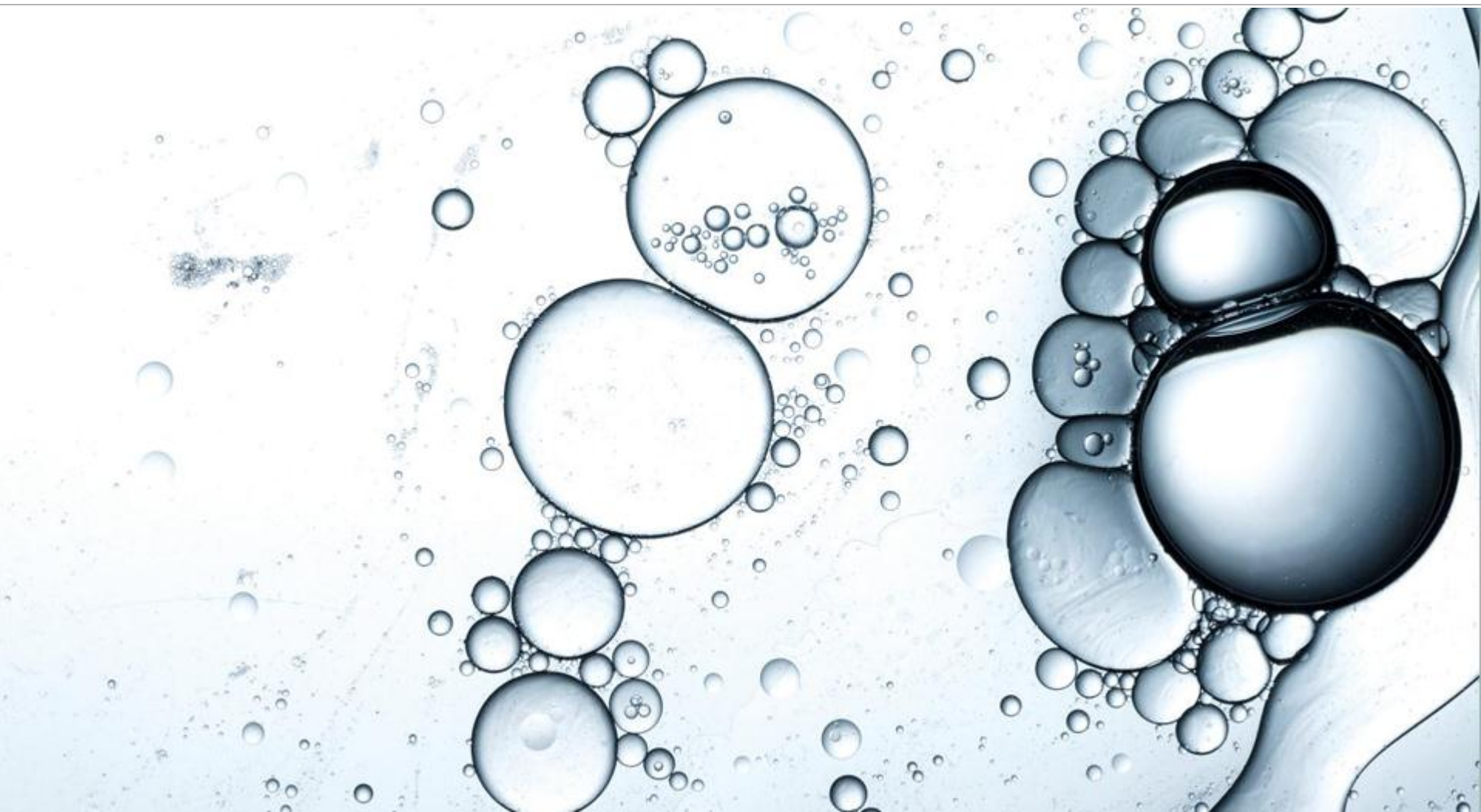
Alcohol-Free\*-- All Natural --Anti-Acne Anti-Ageing—  
Antioxidant—Aromatherapy—Babies & Toddlers (0-4)  
Botanical/Herbal—Brightening / Illuminating\* --Children (5-  
12) Convenient Packaging-- Dermatologically Tested—  
Doctor Brand\* Ease of Use—Ethical - Environmentally  
Friendly Package—Ethical - Environmentally Friendly  
Product— Exfoliating For Sensitive Skin\*--Fragrance-Free  
Hypoallergenic— Limited Edition Long-Lasting\*--Male--  
Moisturising / Hydrating— No Additives/Preservatives— Non-  
Comedogenic—Novel—Oil Free\* --On-the-Go—Organic—  
Paraben Free\*-- Portionability—Protects Against Elements\*-  
-Reduces Redness\*--Seasonal Skin Disorders--  
Time/Speed-- UV Protection--Vitamin/Mineral Fortified  
Water Resistant\*-- Waterproof

Source: Mintel GNPD

# Sunscreen Trend 防晒市场的趋势



# Sunscreen Sensory Study 防晒产品的肤感研究



## Sensory Enhanced by Starches

### Summary 淀粉带来的肤感

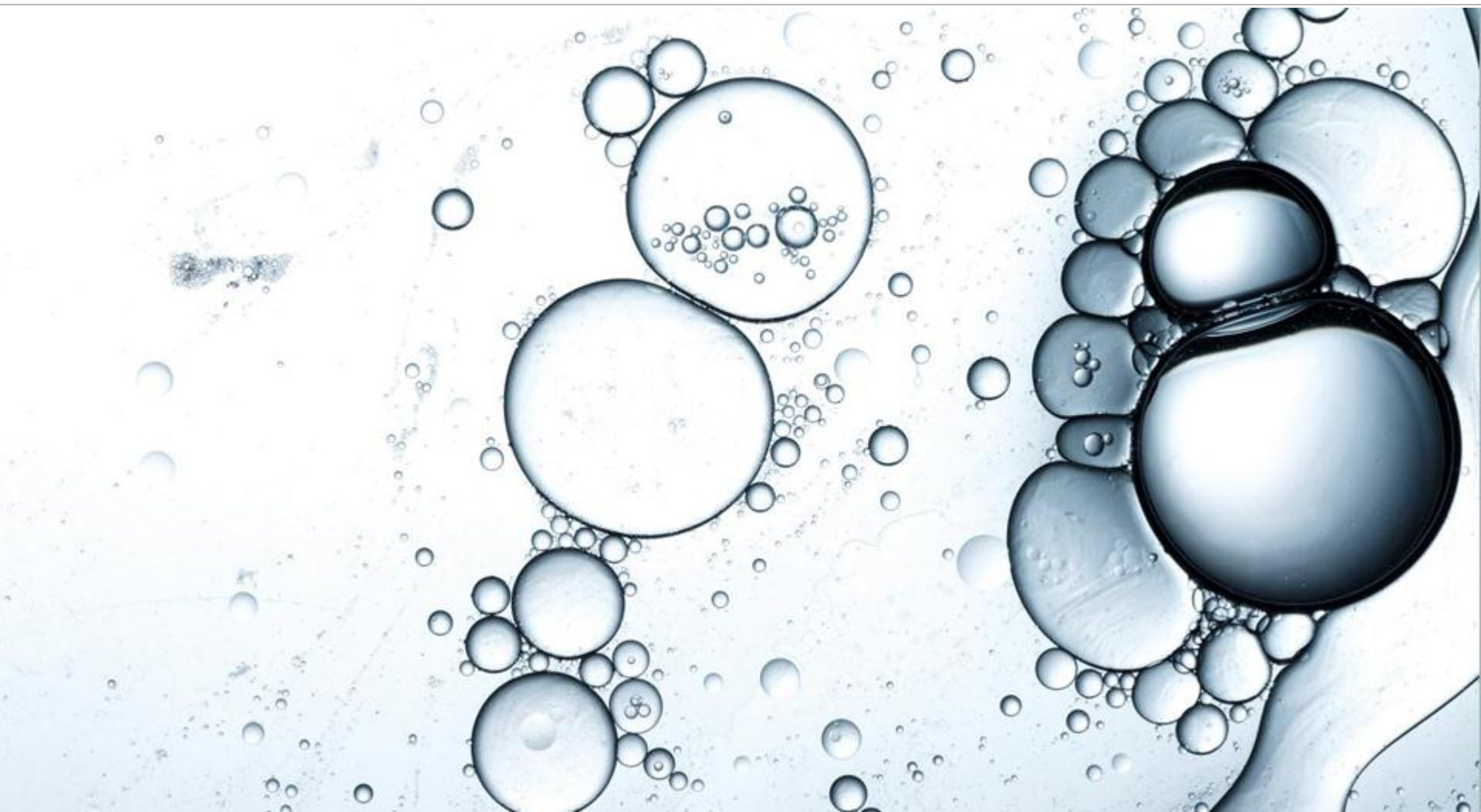
The results suggest that the sensory modifier polymer added in the formulation, *Aluminum Starch Octenylsuccinate* ([Dry-Flo Pure, AkzoNobel](#)),

1. was able to promote softness and velvety feel to the sunscreen, 改善膏体柔软和丝绒般质地
2. and it was able to mitigate and noticeably reduce the oiliness of the skin produced by the other components. 显著减轻皮肤的油腻感
3. In addition, the starch showed a soft and dry sensory of the skin, while also improving spreadability of the product. 赋予皮肤柔软和干爽的感觉，并改善涂抹性
4. The whitening effect from Starches are obvious lighter than from inorganic UV filters. 白化现象显著降低

Thus, it was able to improve the sensory characteristics of the analyzed sunscreen, contributing to greater acceptance by the volunteers.



# Starches from AkzoNobel 来自阿克苏诺贝尔的淀粉

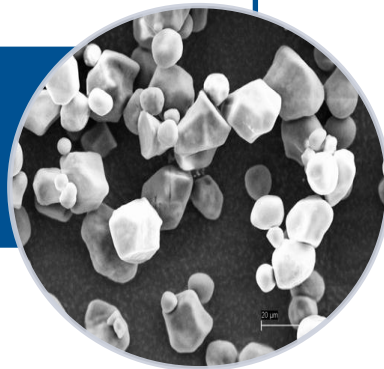




## Native Starches 天然的淀粉

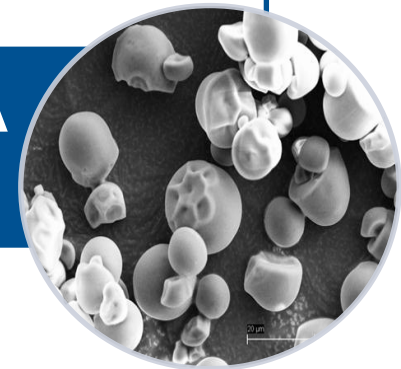
- INCI: Zea Mays (Corn) Starch 玉米淀粉

**PURITY  
21C**



- INCI: Tapioca Starch 木薯淀粉

**TAPIOCA  
PURE**

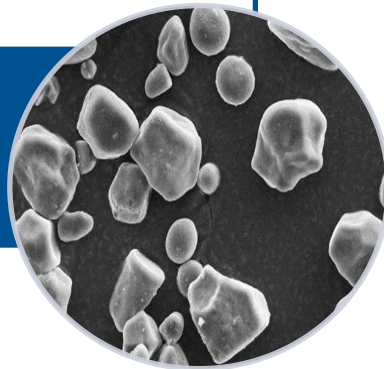


## Modified Starches 改性的淀粉

NEW

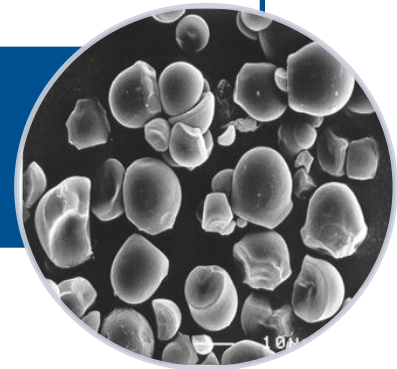
- INCI: Aluminum Starch Octenylsuccinate  
淀粉辛烯基琥珀酸铝

**DRY-FLO  
PC**



- INCI: Tapioca Starch (and) Polymethylsilsesquioxane  
木薯淀粉(和)聚甲基硅倍半氧烷

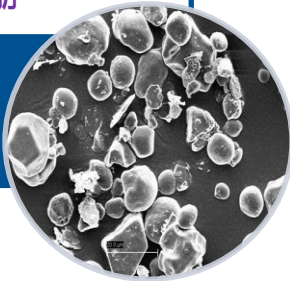
**DRY-FLO  
TS**



# Surface Treated Starches 表面处理的淀粉

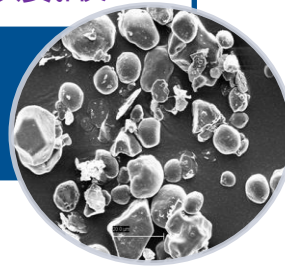
- INCI: Aluminum Starch Octenylsuccinate (and) Boron Nitride  
淀粉辛烯基琥珀酸铝  
(和)一氮化硼

**DRY-FLO  
ELITE BN**



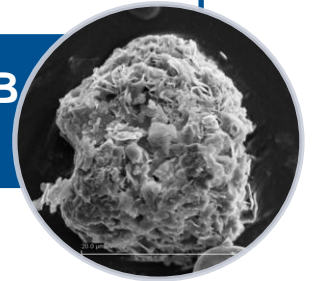
- INCI: Aluminum Starch Octenylsuccinate (and) Lauroyl Lysine  
淀粉辛烯基琥珀酸铝  
(和)月桂酰赖氨酸

**DRY-FLO  
ELITE LL**

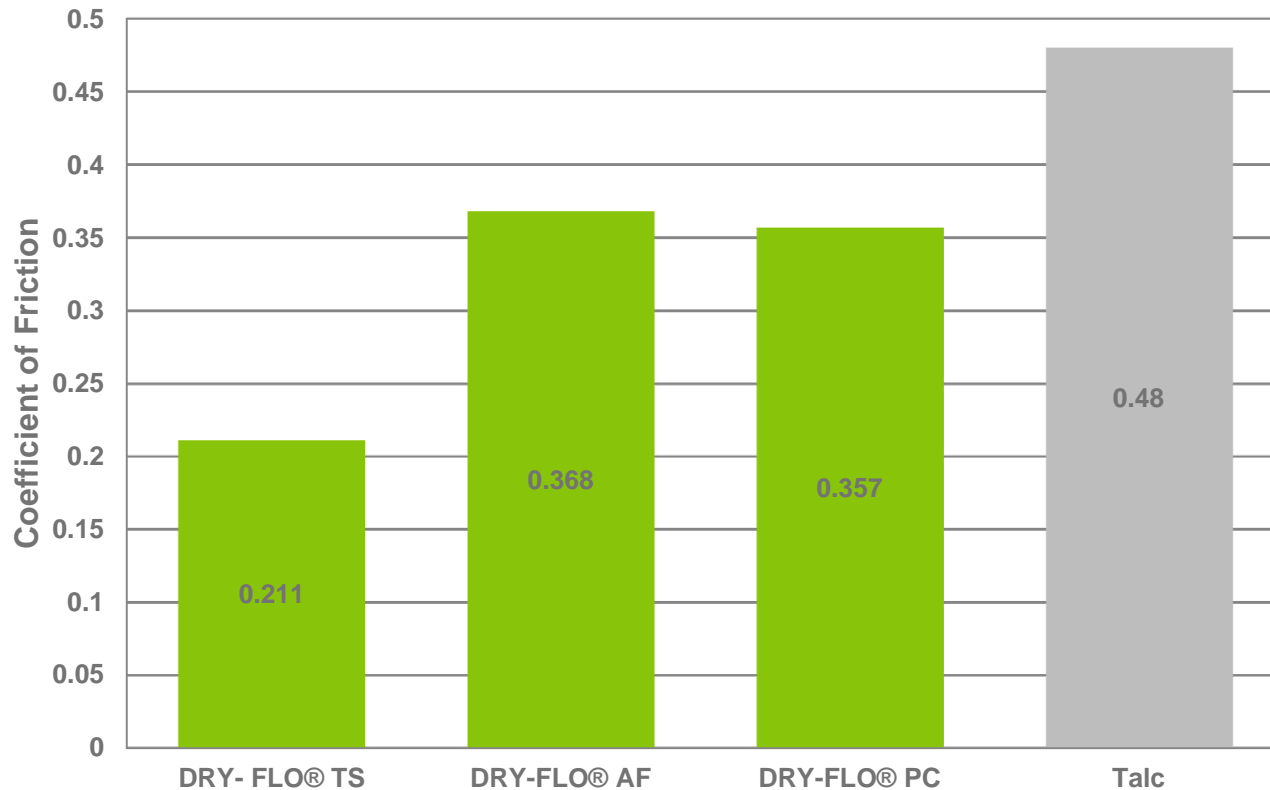


- INCI: Aluminum Starch Octenylsuccinate (and) Acrylates Copolymer (and) Magnesium Carbonate  
淀粉辛烯基琥珀酸铝和丙烯酸(酯)类共聚物和碳酸镁

**NATRASORB  
HFB**

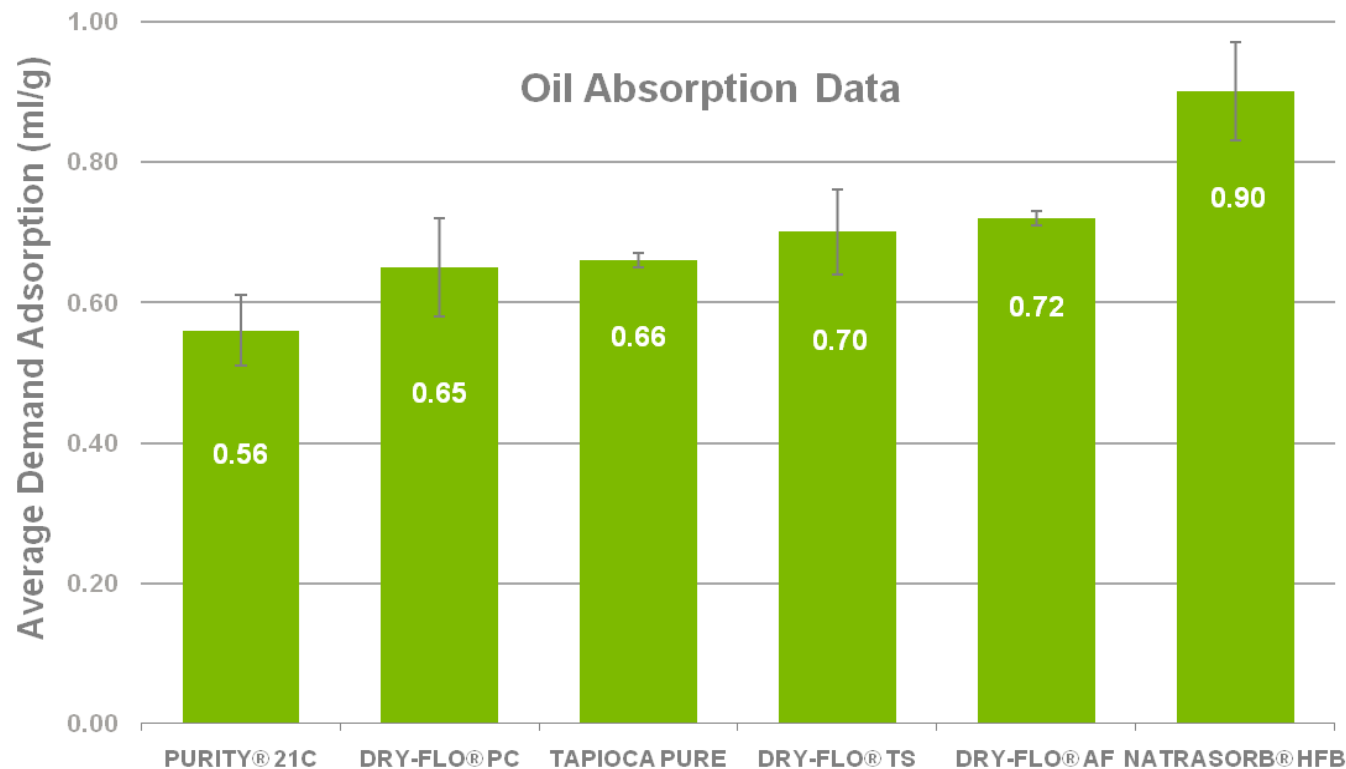


## Friction Data 摩擦数据



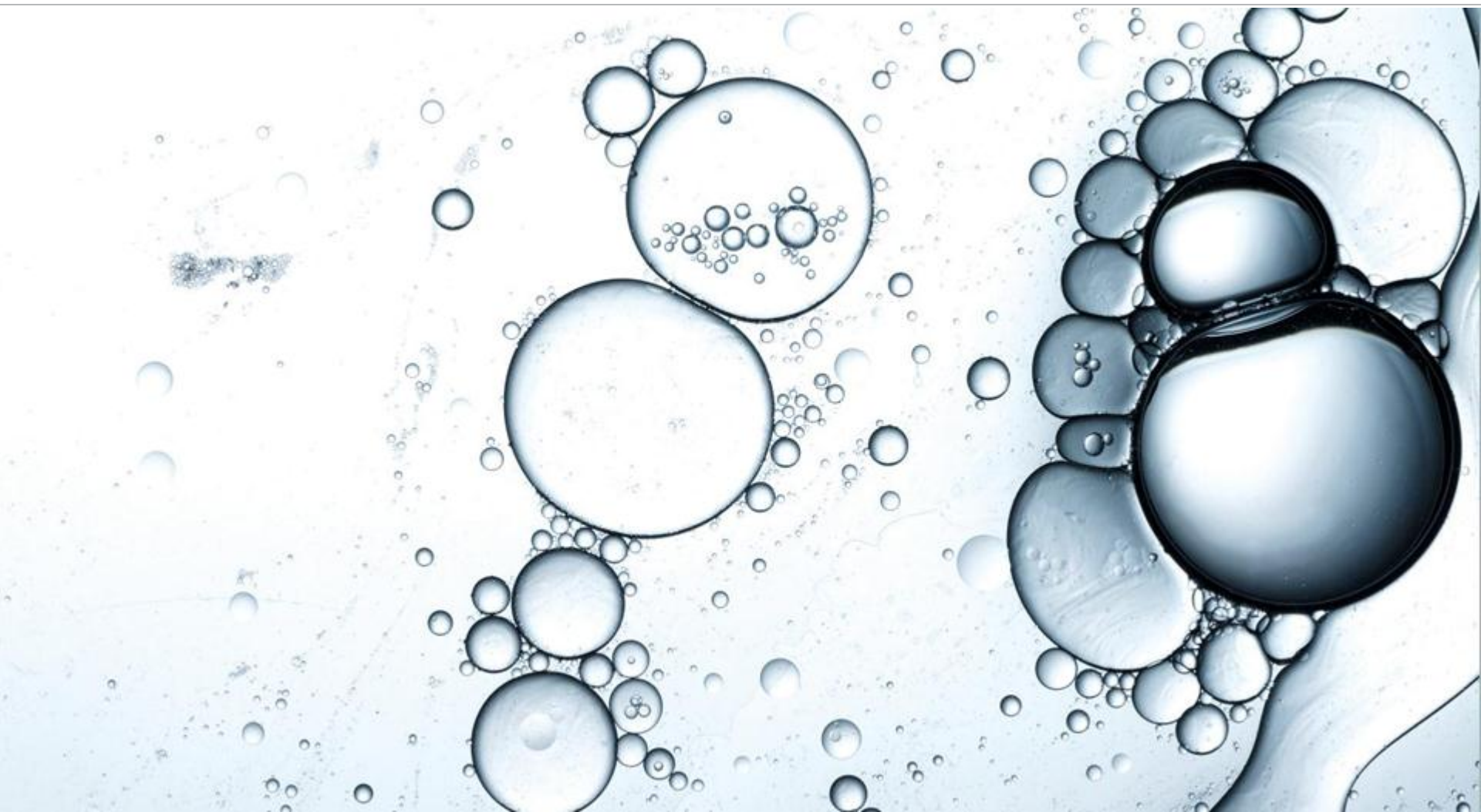
DRY-FLO TS木薯淀粉摩擦较小，在皮肤上产生光滑如丝般的手感  
DRY-FLO TS starch provides less friction, yielding a smooth, silky feel on skin

## Oil Adsorbency Data 吸油性数据



与其他以淀粉为来源的肤感改良剂相比，DRY-FLO TS木薯淀粉的吸油性能相当或有所提高  
DRY-FLO TS starch provides similar or improved oil adsorption compared to other starch-based aesthetic modifiers

# Sun Protection Guideline 日光防护贴士



# Sun Protection Guideline

## 日光防护贴士

Use sunscreen products only as one out of many measures to protect against the sun.  
防晒化妆品仅仅是日光防护的方法之一

Other measures include: 其它的手段有

- **Avoid excessive sun exposure at peak hours**, which is usually between 11am and 3pm; 避免日晒高峰时间的暴晒
- When it is not possible to stay out of the sun, **keep yourself well covered**; 尽量遮蔽自己
- **Hats and sun glasses** can give you additional protection; 戴太阳帽和太阳镜
- **Avoid direct sun exposure of babies and young children**; 婴儿和儿童避免直晒
- Use sunscreens products protecting **against both UVB and UVA radiation**; 防护UVA 和UVB
- **Apply sunscreen products regularly** to maintain the protection claimed; 经常补妆
- Apply sunscreen products **in sufficient quantity**. 足量的防晒霜

Remember that:

- **90% of solar UV radiation can penetrate light clouds** so you can get sunburnt even on a cloudy summer day. 90%的UV可以穿透薄的云层
- **Water offers minimal protection from UV radiation** and reflections from water can enhance your UV radiation exposure 水的紫外保护作用低，并能反射和增强紫外照射
- **Solar radiation exposure is cumulative during the day** so taking regular breaks during sunbathing will not mean lower total exposure. 日光的照射作用会积累

[www.skincancer.org](http://www.skincancer.org).



**THANK YOU**

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beauty**

**WeCare<sup>TM</sup>**



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