

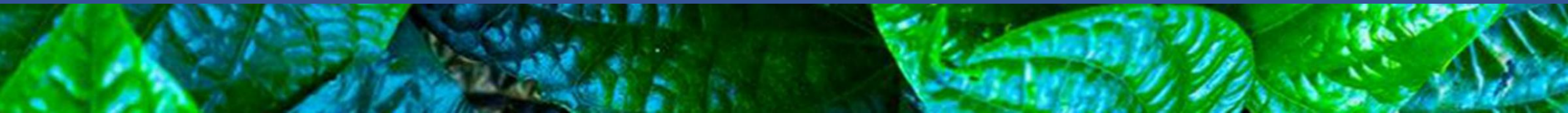


ZeniStarch XL

Naturally Engineered for Superior Performance
天然优化，成就卓越性能

Agenda 目录

- ZeniStarch XL Product Properties 产品特性
- ZeniStarch XL Performance 产品性能
- ZeniStarch XL In Different Applications 不同应用产品的表现特性
- Successful stories 市售样品展示
- Conclusions 总结



01

ZeniStarch XL

Product Properties

产品性能



Product Properties 产品特性

INCI 名称: Hydroxypropyl Starch Phosphate 羟丙基淀粉磷酸酯

Appearance 外观: White to Off-white Powder 白色至灰白色粉末



Model Chemical structure 分子结构:



Properties 特性:

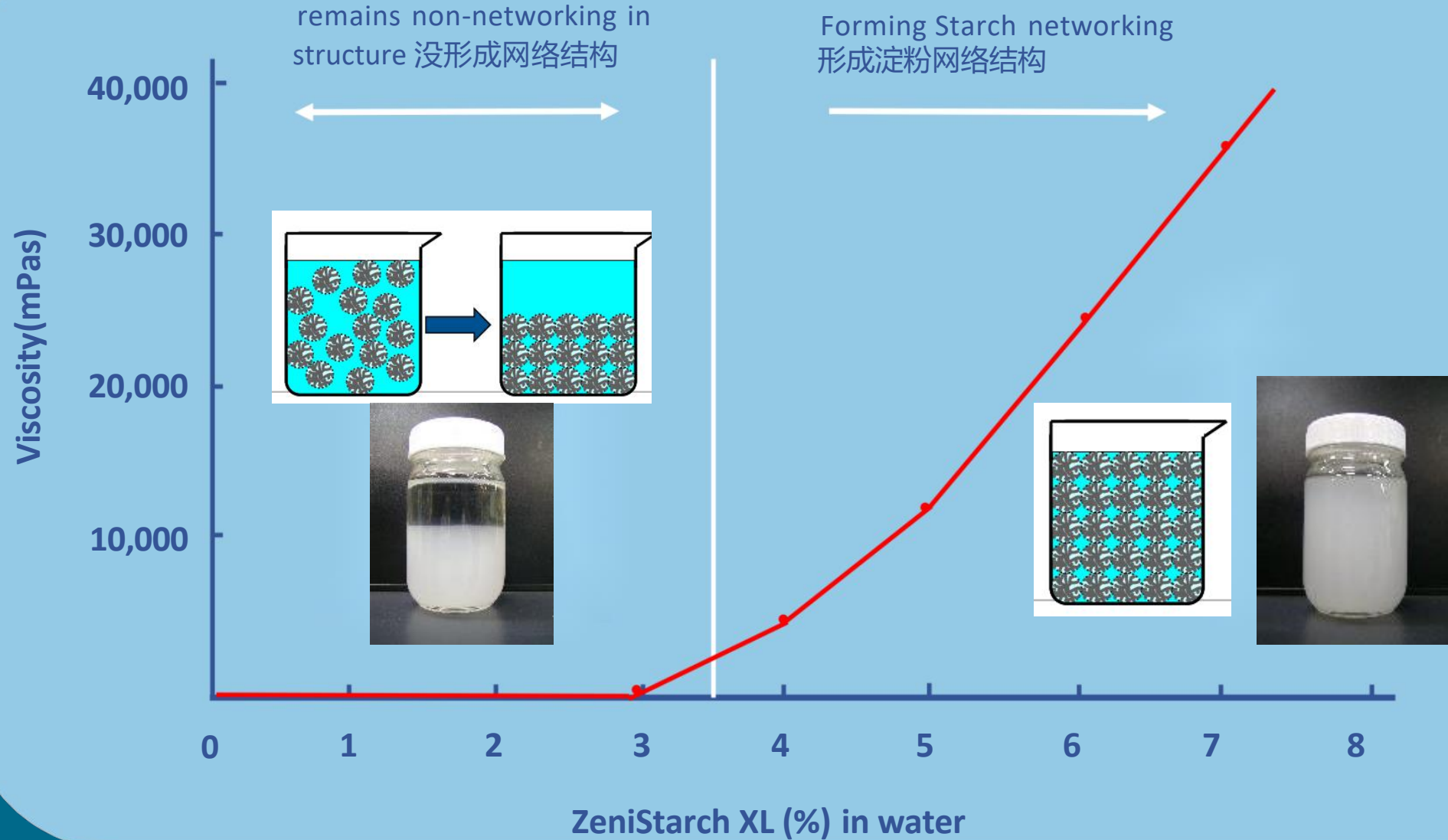
- Waxy corn starch based 来源于蜡质玉米改性(天然来源)
- Nonionic 非离子
- Hydroxypropylation 羟丙基化 – 为了达到稳定性、复配性
- Cross-linked 酯化交联化 – 外观、短流变、剪切稳定性、pH和温度稳定性
- Pregelatinized 预糊化 – 容易使用和分散
- Granulation 造粒 – 快速溶解、无粉尘



02

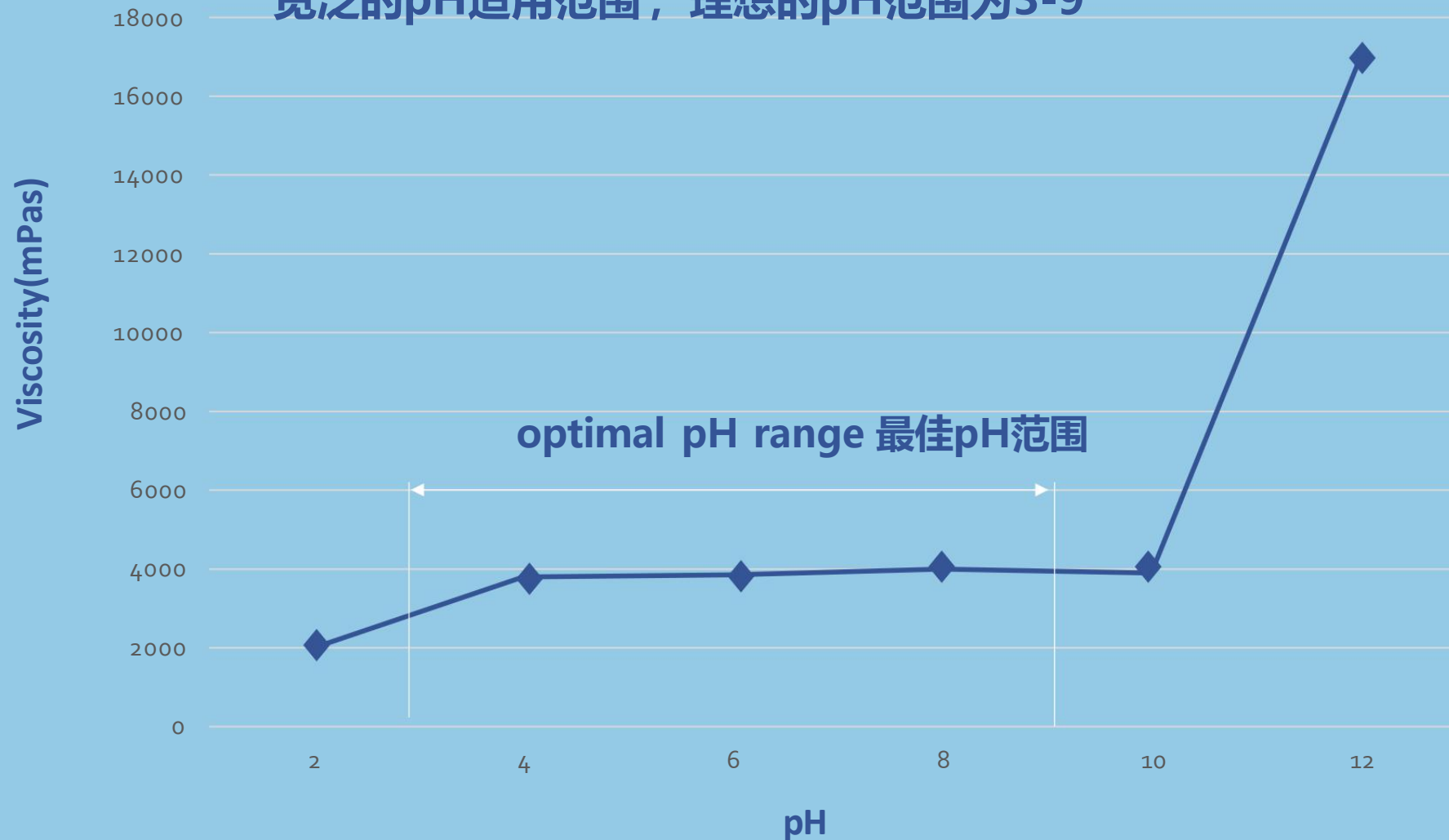
ZeniStarch XL Performance 性能评估

Viscosity in water 水中粘度



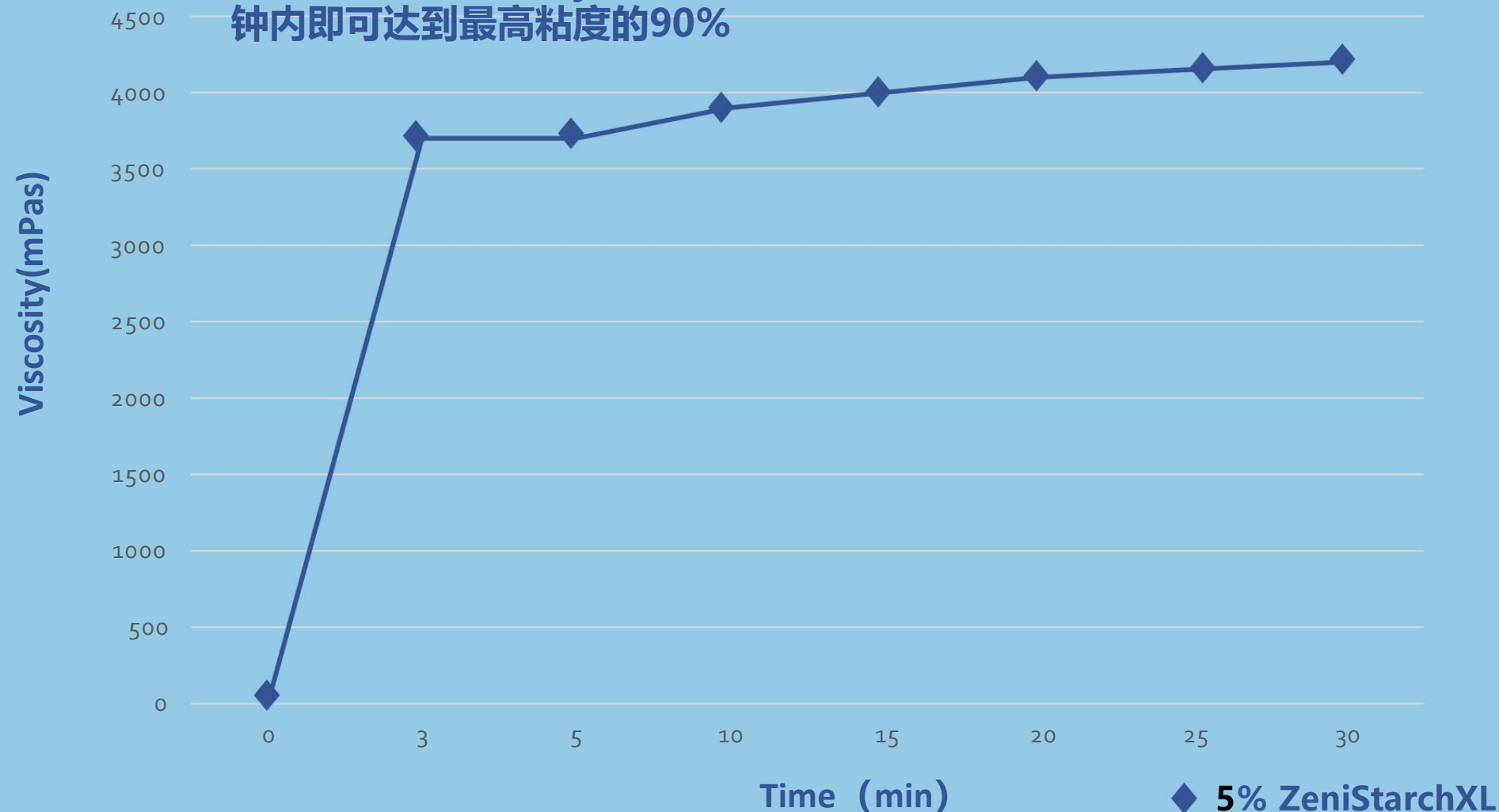
pH Stability pH稳定性

Broad pH range and ideal pH Range from 3 – 9
宽泛的pH适用范围，理想的pH范围为3-9



Dispersibility 分散性能

Quickly hydrates in cold water, attaining up to 90% of its maximum viscosity in 3 minutes. 可在冷水中快速分散与膨胀，3分钟内即可达到最高粘度的90%



Cold water dispersibility 冷水分散性能

ZeniStarch XL has demonstrated easier dispersion vs. competitive materials in cold water
Zenistarch XL在冷水中的分散性优于竞争材料。

Pictures taken at 120 second time point
在120秒时拍摄的照片

Source: IPS Labs Dispersability Study 2015



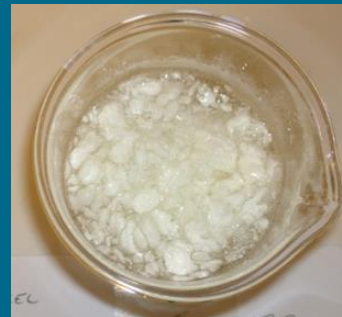
ZeniStarch XL (0.25%)



Ammonium Acryloyldimethyltaurate/VP
Copolymer (0.25%)
丙烯酰二甲基牛磺酸铵/VP 共聚物 (0.25%)



Carbomer (0.25%)
卡波姆 (0.25%)



HYDROXYPROPYL
METHYLCELLULOSE 1 (0.25%)
羟丙基甲基纤维素 1 (0.25%)

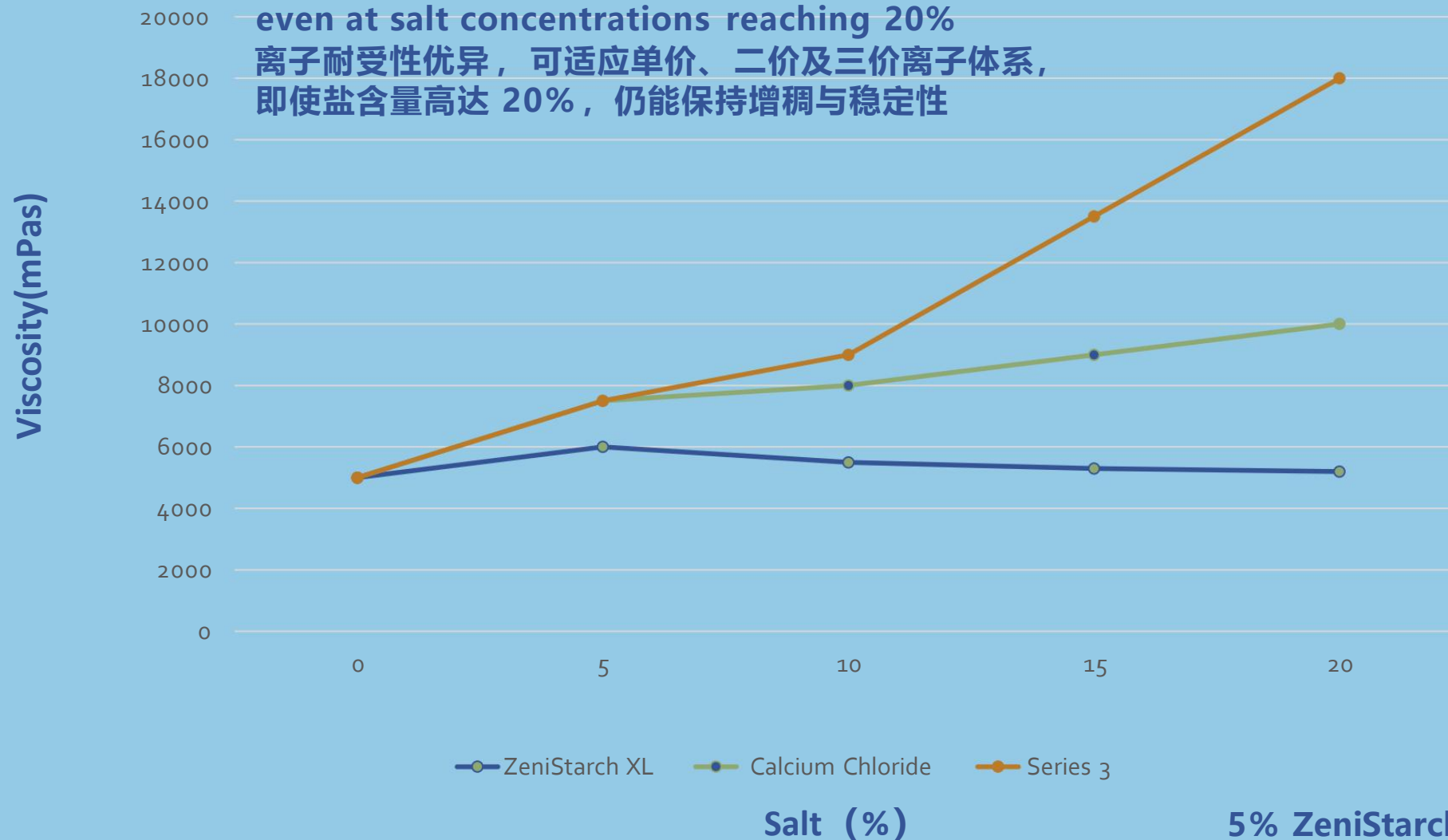


HYDROXYPROPYL
METHYLCELLULOSE 2 (0.25%)
羟丙基甲基纤维素 2 (0.25%)

Salt Tolerance 耐电解质性能

Highly tolerant to ionic species, maintaining stability with monovalent, divalent, and trivalent ions. Remains effective as a thickener and stabilizer even at salt concentrations reaching 20%

离子耐受性优异，可适应单价、二价及三价离子体系，即使盐含量高达 20%，仍能保持增稠与稳定性





03

ZeniStarch XL **in Different Application** **在不同应用中的特性**

ZeniStarch XL Contribution in Surfactants Systems

在表活体系（洗面奶/沐浴露中）的贡献

Thickening流变改良



- Thickening high electrolyte systems
增稠高电解质体系
- Especially suitable for difficult-to-thicken system
特别适用于难以增稠的体系

Foam Booster增强泡沫



- Quick Foaming
起泡快
- Rich and fine foam
泡沫量丰富细腻
- Good form stability
泡沫稳定性好

助乳化/稳定Emulsifying Agent



- High oil content facial cleanser or body wash
高含油的洗面奶/沐浴露

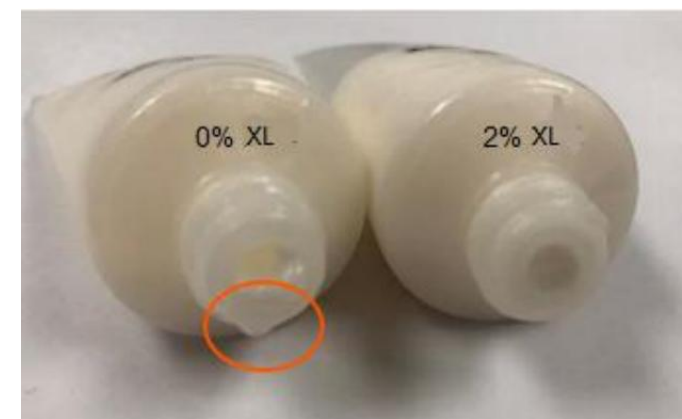
ZeniStarch XL in Soap-based Facial Cleanser 皂基洗面奶应用

Foaming Test 泡沫测试结果



- More foam 泡沫量更多
- Finer and creamy foam 泡沫更细密，奶油状
- More elastic foam 泡沫更具有弹性

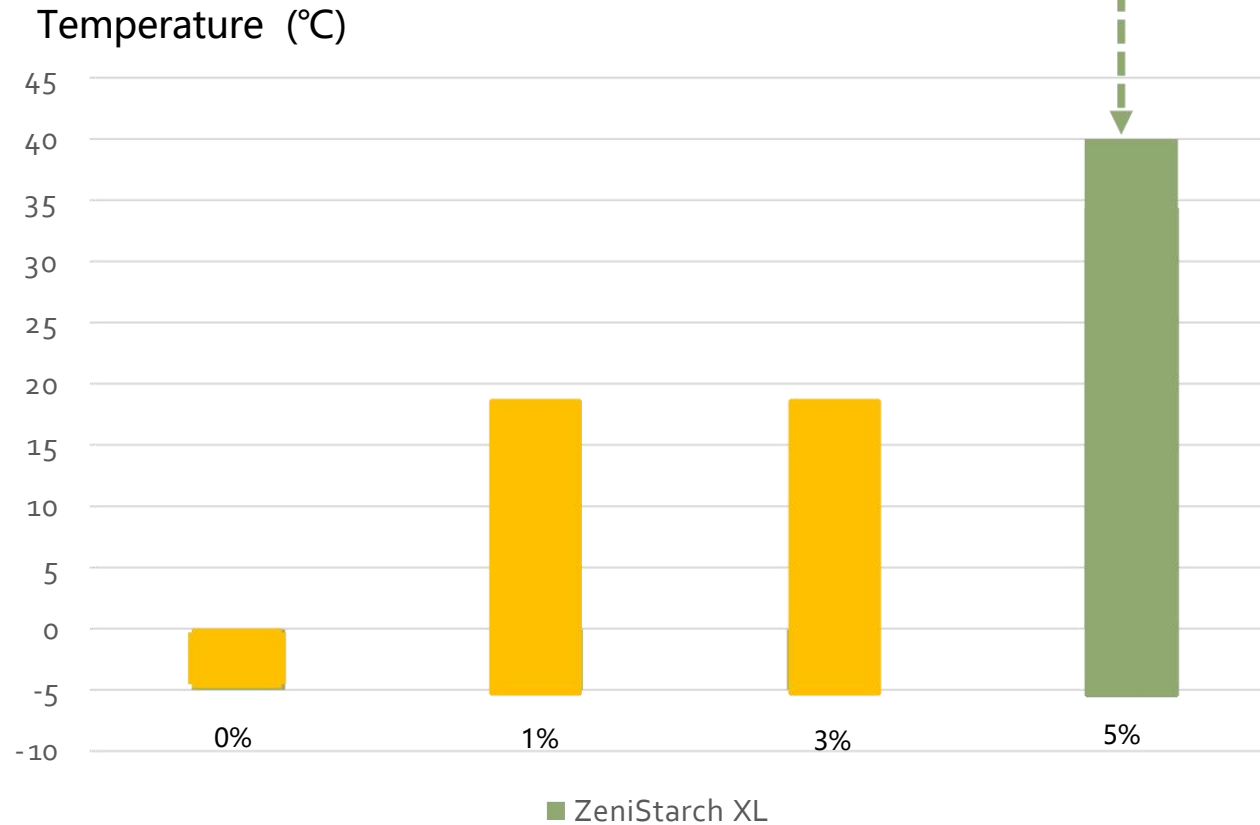
Formulation Test 配方测试结果



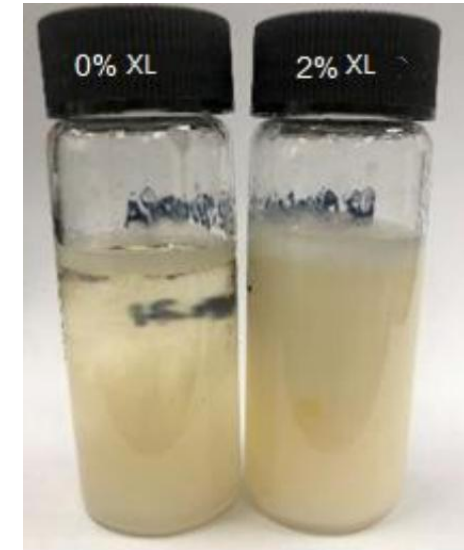
It can also reduce the water separation (bleeding) issue in facial cleanser tubes.
还可以改善洗面奶膏管出水现象

ZeniStarch XL in Amino Acid-based Facial Cleanser 氨基酸洗面奶应用

Stability Contribution 对氨基酸洗面奶稳定性的贡献



Formulation Test 配方测试结果



It helps to address the issue of high-temperature stratification in amino acid facial cleansers
可帮助解决氨基酸洗面奶高温分层的问题