

# Laponite® XL21

## Product Data Sheet

Laponite Technical Bulletin  
L366/06c

### Product description

**Laponite® XL21** is a synthetic layered silicate manufactured from naturally occurring inorganic mineral salts. It is insoluble in water but hydrates and swells to give colourless, translucent colloidal dispersions. The product can be used in a wide range of personal care products to give a light texture with highly shear thinning and thixotropic rheological properties.

**With a lower acid demand than conventional grades, Laponite® XL21 has been developed to give improved performance and stability in personal care products formulated at pH 5.5.**

### Applications

**Laponite® XL21** will improve texture and feel in a wide range of personal care formulations including:

*moisturising creams and lotions*  
*sun care*  
*hair care*  
*baby care*  
*skin wash/ shower gels*  
*depilatory creams*

It is also suitable for use in formulations at pH 4 or lower, such as *alpha*-hydroxy acid based "peeling" creams and lotions.

### General specifications

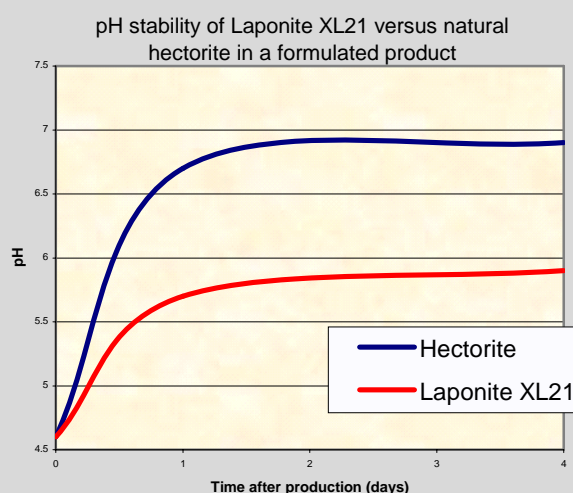
		Rockwood QA test code
Gel strength	15g min	ELP-L-1H
Sieve Analysis	2% Max >250 µm	ELP-L-6A
Free Moisture	10% Max	ELP-L-5A
Lead	5mg/kg Max	ELP-L-16A
Arsenic	1mg/kg Max	ELP-L-17A

Specifications can be agreed to meet individual requirements

### Typical characteristics

Appearance- free flowing white powder  
Bulk Density- 900 kg/m<sup>3</sup>  
2% suspension in deionised water- pH 9

The improved pH stability of **Laponite® XL21**- at "skin-friendly" pH level- is compared with a natural hectorite product, in the graph below.



### Recommended dispersion procedure

It is recommended that **Laponite® XL21** is dispersed in water using a mechanical stirrer. Dispersion time will vary depending on water temperature, Laponite® solids content, and type and speed of mixer used, but is typically complete after 30 minutes. High shear mixing is not required for Laponite® products.

INCI name: sodium magnesium fluorosilicate  
CAS No. 85085-18-3/ EINECS No. 285-349-9

### Storage

**Laponite® XL21** is hygroscopic and should be stored under dry conditions, in original packaging.

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