

# Pullulan

natural starch based polysaccharide from Hayashibara

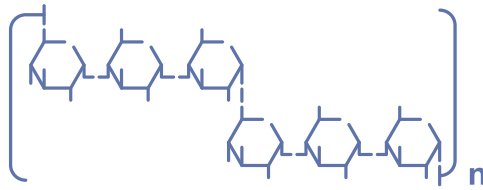


for film formation and texture creation



# Pullulan

**Pullulan from Hayashibara** is a natural polysaccharide produced by fermentation. Its source material is of 100% vegetable origin.



**Pullulan from Hayashibara** is available as a white, odourless powder which can provide smoother texture to cosmetic products.

## Easy to use

Pullulan is readily soluble in water. This makes it easy to use in shampoos, hair conditioners, shower gels, bathing products and other “wash-away” products.

It is also stable over a broad range of pH conditions when in solution.

## for the creation of texture

### Smoothness

Pullulan has excellent adhesive properties when dried, and excellent foam retention properties when it is dissolved in water.

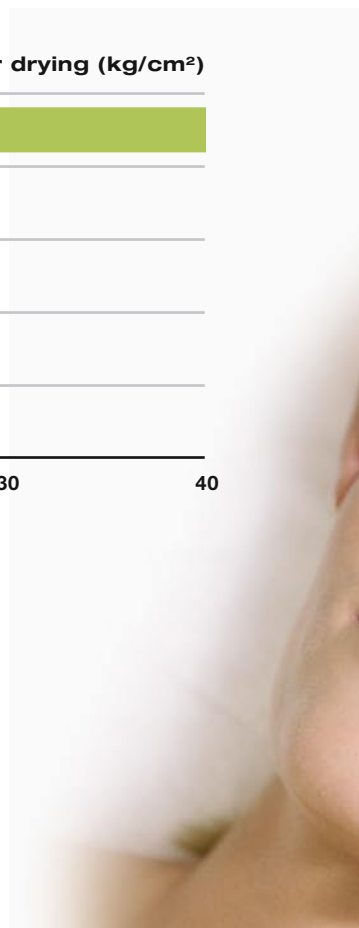
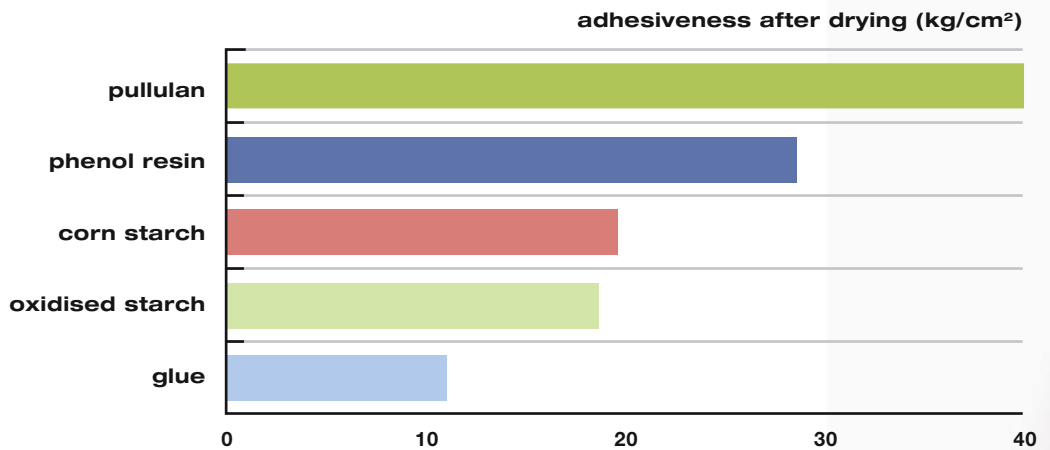
Importantly, pullulan solution is not highly viscous – and this enables it to be used for creating luxuriantly smooth textures for skin care, hair care and facial cleansing products.

### Body coating products

The excellent adhesive properties of pullulan, together with its low viscosity, enables active ingredients to be effectively applied to the body by hand, spray or roll-on.

### Improved product formulation

The excellent adhesive properties of pullulan also makes it suitable as a binder for agglomerated products – helping to improve the performance of existing manufacturing processes by providing an opportunity to create new product presentations for the consumer.



# for facial masks, cosmetic films and hair styling products

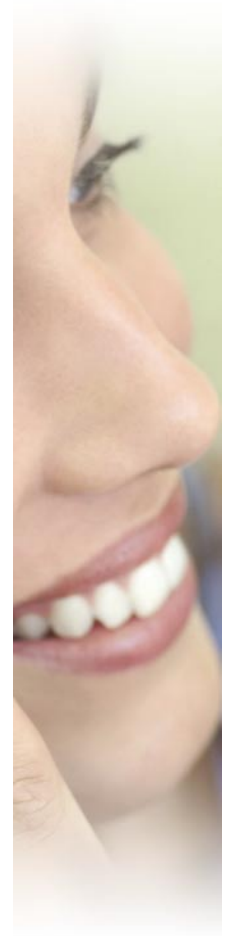
## Film forming characteristics

Pullulan is an excellent film former, producing strong films that may be modified by the inclusion of other gums and gelling agents.

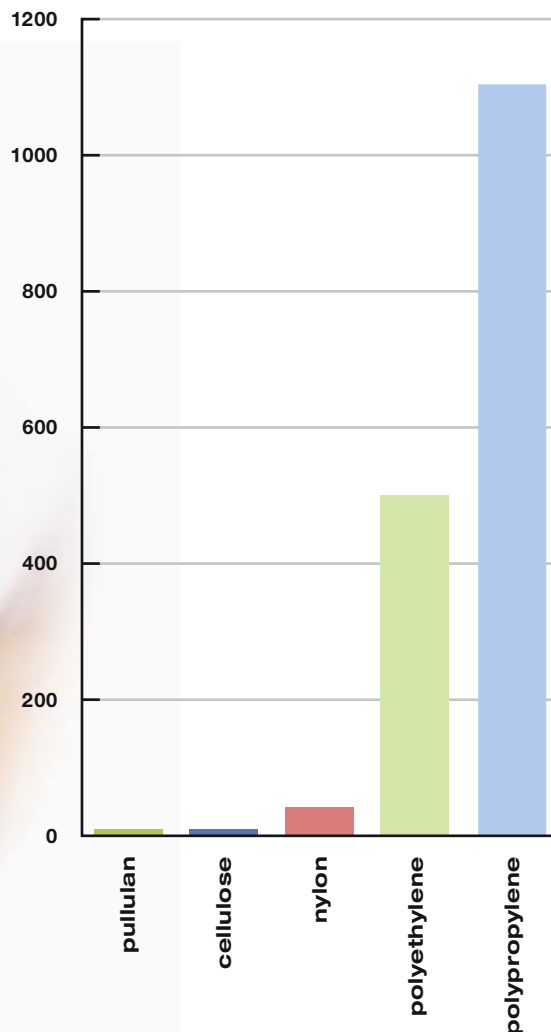
Pullulan film is anti-static, impermeable to oxygen and oil resistant.

Importantly, active ingredients may be incorporated into the film and effectively stabilised.

This can provide a novel presentation for innovative cosmetic products – such as facial masks and hair styling strips – while the high water solubility of pullulan allows for the final product to be easily washed away.



oxygen permeability of  
pullulan film (cc/m<sup>2</sup>/24hr/atm)



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**INCI name: Pullulan**

**Pullulan** is manufactured by  
**Hayashibara International**



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