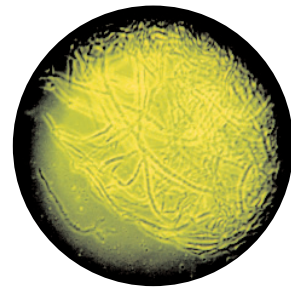




- **Natural (non-ionised) thickening and gelling agent**
- **A smooth and unctuous cosmetic feel**
- **Incomparable stabiliser for emulsions and suspensions**

A product of Biotechnology

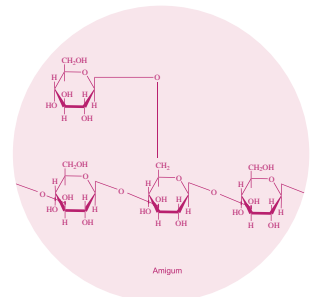
Amigum is obtained by fermentation of *Sclerotium rofsii* in a glucose-enriched medium.



A very stable polysaccharide

Amigum is a homopolysaccharide containing glucose as the sole monomer with a molecular weight of 5 to 6 million Daltons.

The type of linkages found in the molecule gives it a high stability that explains the good resistance of Amigum to ageing, extreme physical and chemical conditions and most enzymatic degradations.



Gelling and thickening properties

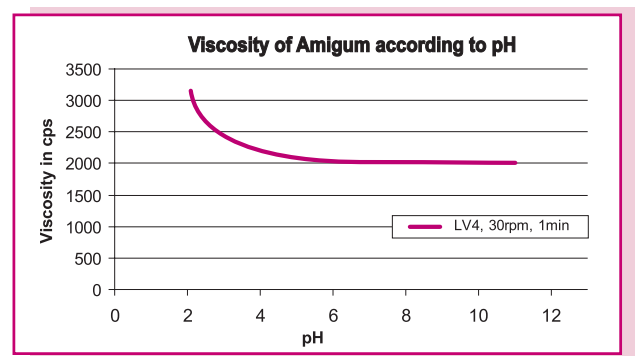
From 0.8 % concentration, aqueous solutions of Amigum form a solid gel. It does not need to be neutralised to be stable.

Amigum at 1 % is stable for a wide range of:

- temperatures (5° to 70°C);
- salt concentrations (1 to 12 %);
- pH (2 to 11).

It can be formulated in presence of high amounts of solvents like:

- ethanol (up to 20 %);
- propylene glycol (up to 25 % at least).

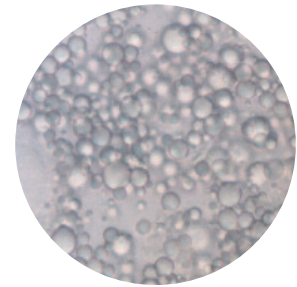


Stabilisation of emulsions and suspensions

■ Emulsions

Amigum is not an emulsifier strictly speaking, but it forms a network around oily particles and avoid their coalescence which would break the emulsions into phases.

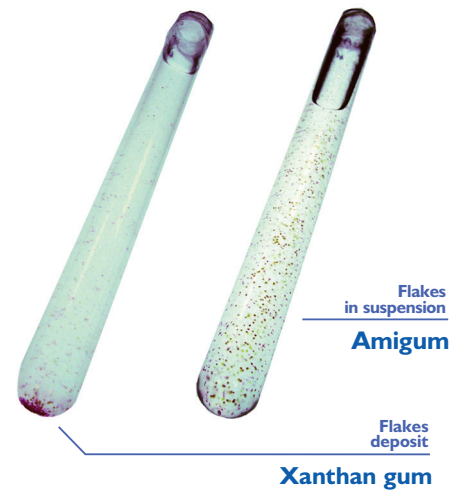
Amigum was tested at 1 % and 2 % in emulsions with respectively 10% and 20 % oil. They remained perfectly stable.



■ Suspensions

The suspending properties of a product do not depend only on its viscosity and can be defined as its ability to maintain particles in suspension without settling. This characteristic is put in evidence by calculating its yield value, a rheological parameter which represents the limiting resistance of the product to the strain which provokes flowing.

Amigum was compared to xanthan gum, renowned to be a natural gelling agent with excellent suspending properties. It proved to be even better!



Cosmetic applications

Amigum allows the formulation of:

- natural gels with a soft texture and an incomparable touch;
- ingredients difficult to use (AHAs needing acidic pH for instance);
- stable emulsions;
- powders such as titanium oxides or make-up pigments (for sun-protecting products and foundations for instance)



**Amigum is safety tested
and highly biodegradable**