

Thickening & emulsifying polymer for extreme conditions
(acidic, alkaline or oxydizing conditions)
for sprayable gels

SOLAGUM™ USPI,

SOLAGUM™ USPI is a polymer based on HSD (Hydro Swelling Droplets). These droplets swell when added to water, enabling, the polymer to expand.

SOLAGUM™ USPI acts as a thickener & emulsifier and it is produced from water-soluble monomers polymerized in a continuous oil phase.

Product performance

Inverse emulsions do not need to be neutralized, they are “ready to use” and they will thicken immediately after addition to the medium.

SOLAGUM™ USPI can be used at room temperature and only requires moderate shear to be activated.

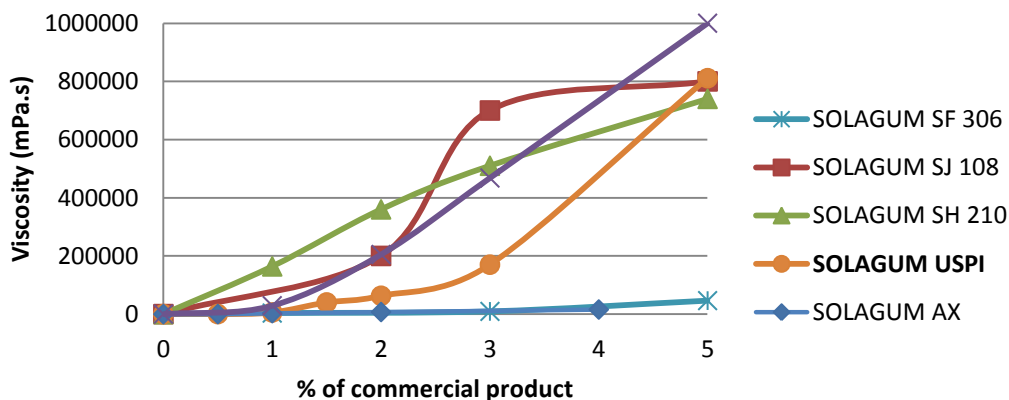
SOLAGUM™ USPI is just as effective in acidic, alkaline or oxidizing conditions.

SOLAGUM™ USPI can be used in synergistic combinations with other thickeners (xanthan gum, guar gums, vinyl polymers, CMC, ...

SOLAGUM™ USPI can emulsify and stabilize oily components (up to 50% oily phase) without addition of an emulsifier. The gel-emulsions are stable and perfectly homogeneous in appearance.

Rheological behavior of SOLAGUM USPI in comparison to other SOLAGUM™ grades

Viscosity of solution related to concentration (Brookfield LVT 6 rpm, 20°C)



- Ready to Use polymer in fluid form

- Compatible at any pH (2-13)

- No heating , neutralizing & maturing phases required

- Excellent Emulsifier even with silicone oil

Ideal to manufacture sprayable gels

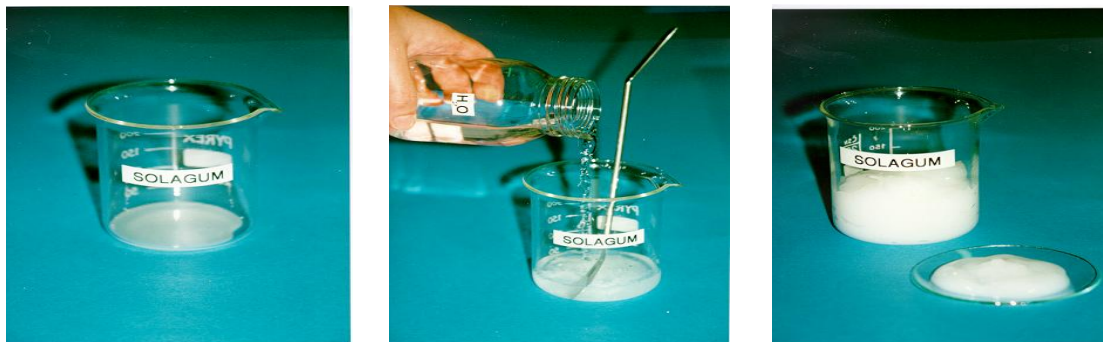
Preparation of aqueous alkaline or acidic gels

Add SOLAGUM™ USPI to the water containing vessel under agitation to prepare a pre-gel. Keep stirring when adding the alkaline or the acidic solution. Maximum viscosity is achieved after one day in alkaline solution and 3 to 4 days in acidic media.

Compatibility with surfactants

SOLAGUM™ USPI is compatible with non-ionic, anionic and amphoteric surfactants. **It is not compatible with CATIONIC surfactants !**

Effective & Easy-to-use: no neutralization, no heating needed



For improved stability of emulsions, prepare pre-gel in water under high-shear. Solvents and oils are added in a second step to complete the formula

Compatibility with electrolytes

Electrolytes tend to decrease the thickening effect of SOLAGUM™ USPI. Therefore, they should be added at the end of the process to adjust viscosity as desired. This operation may require higher amounts of SOLAGUM™ USPI. In order to overcome this limitation, SOLAGUM USPI can be associated with other thickeners such as SOLAGUM AX, Vinyl polymers, CMC's, ...

SOLAGUM™ ELX, SOLAGUM™ AX and SIMULGEL™ EG are offer better resistance to electrolytes.

Solvent thickening

SOLAGUM™ USPI can be used to develop anhydrous gels can be used to thicken oxygenated solvents: DMSO, N-Methyl Pyrrolidone,

Additional information

- Storage conditions: in a dry place at room temperature. **Storage at low temperature can induce phase separation.**
- Shelf life: use within 24 months from date of manufacture is recommended Drums should be closed tightly during storage.
- Others: **Product should be re-homogenized prior to use!**
For industrial use only .

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