

# INAGEL green<sup>®</sup>

Natural Texturing Agent

GELLING  
AND  
THICKENING

SUSPENDING  
AND  
DISPERSING

EMULSIFYING  
POWER

PATENTED  
PREMIX



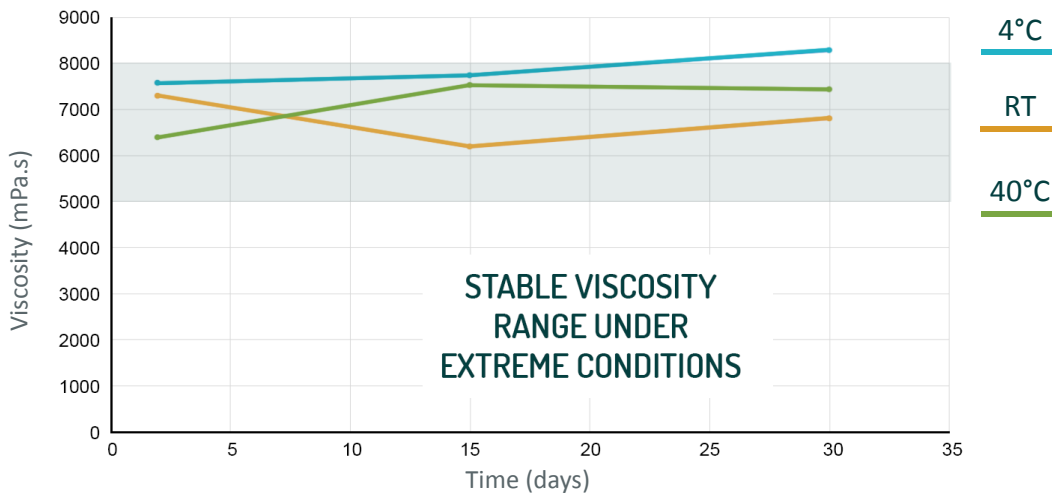
The patented premix INAGEL GREEN includes the highest purity of Konjac glucomannans with improved solubility, stability and functionality for cosmetic formulation. Amorphophallus KONJAC has long been used in China, Japan and South East Asia as a food source.

Hydrocolloidal polysaccharide composed of mannose and glucose units branched by  $\beta$  1-4 glycosidic linkages. High molecular weight ranging from 200 000 to 2 000 000. Acetyl groups contribute to the solubility of the polymer. (They are present on average, at every 19 sugar residues.)



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APPROVED

## Stability at different temperatures

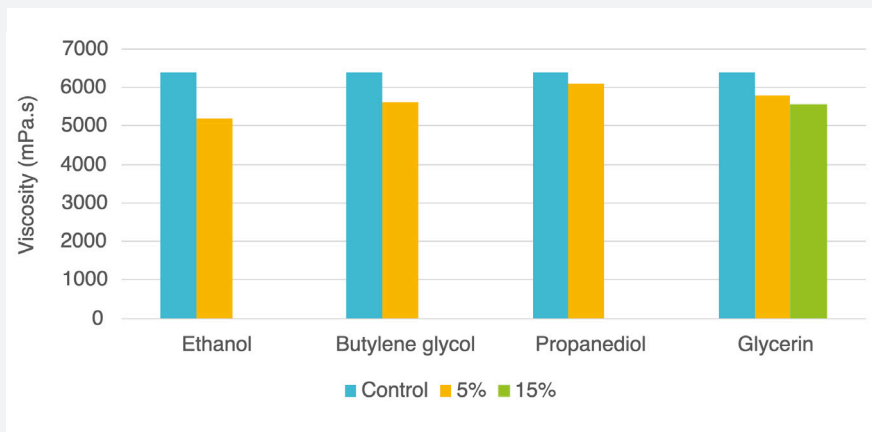


Inagel Green gels (1%) are stable at different temperatures.

\*The viscosity was measured 48h after preparation with a Brookfield viscosimeter at 60 rpm, 1 min



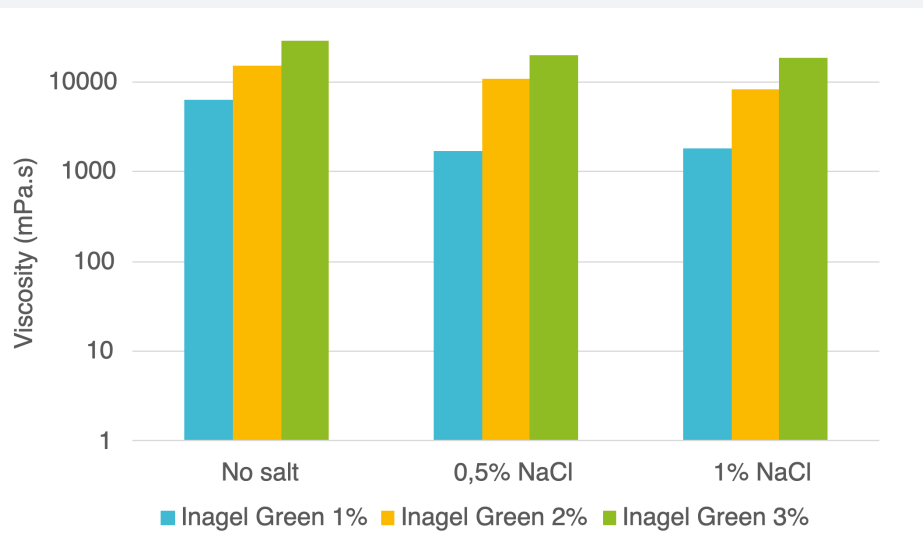
## Compatibility with solvents



Viscosity of 1% Inagel Green gels in the presence of solvents compared with a control (no solvent)

\*The viscosity was measured 48h after preparation with a Brookfield viscosimeter at 60 rpm, 1 min

## Compatibility with NaCl



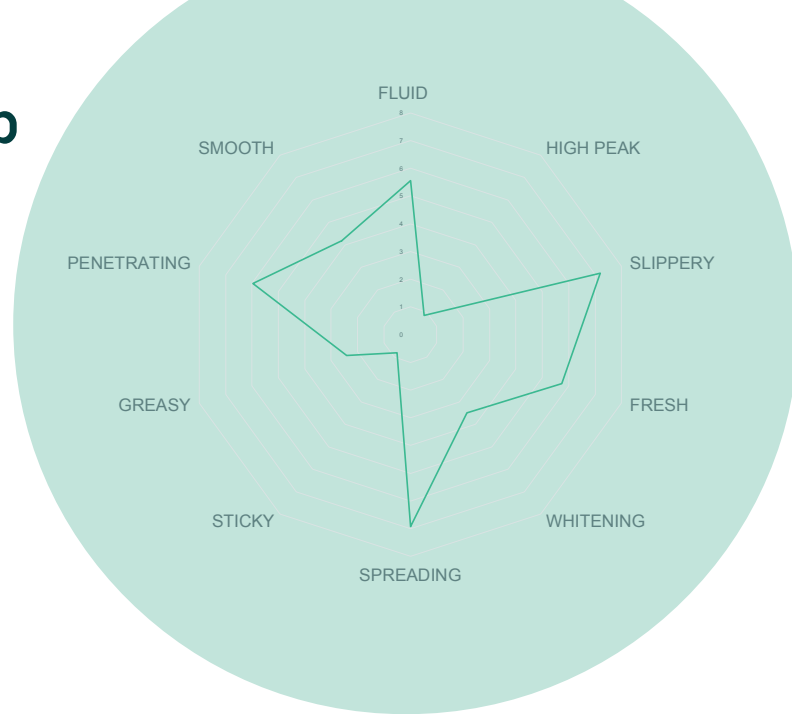
In formulations with salt, increasing the amount of Inagel Green allows to compensate the loss of viscosity and to stabilize the gel (no syneresis observed after 2 weeks)

\*The viscosity was measured 48h after preparation with a Brookfield viscosimeter at 60 rpm, 1 min


# Pampering Hand Scrub

With less than ten ingredients, this gentle scrub will bring instant comfort to your hands. The film-forming effect will protect from dryness and external aggressions while the fine beads of glucomannan will delicately scrub and smooth the skin. Do not rinse and feel your hands softer than ever !


	NAME	PURPOSE	%
A	Sweet Almond Oil	Emollient	12
	Coco Caprylate	Emollient	8
	Glyceryl Stearate Citrate	Emulsifier	3
B	Water	Solvent	59,5
	Sodium Benzoate	Preservative	0,5
C	INAGEL GREEN	GELLINGAGENT	1
D	Glucomannan	Scrub	5
	Glycerin	Emollient	10
E	Evodia Rutaecarpa Extract	Active	1




\*Sensory evaluation performed on a trained panel



**GOOD  
PENETRATION**



**NON STICKY  
NON GREASY**



**GOOD  
SPREADING**

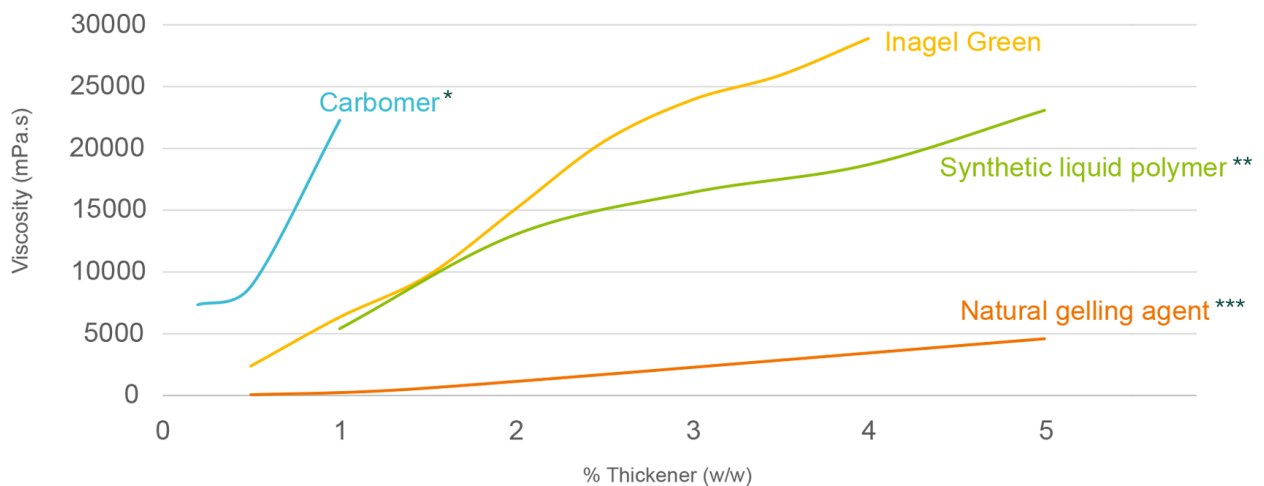
## Process

Weight A and B separately, heat up to 70°C. Add B into A and stir for 15 minutes at 2000 rpm. Cool down to 50°C and add C, stir for 20 minutes. Cool down to RT, decrease speed to 1000 rpm. Add D and E and keep stirring for 10 more minutes.

Viscosity: 11 000 mPa.s | 48 Hours



## Comparison of the thickening behaviour



\*\* POLYACRYLAMIDE & C13-14 ISOPARAFFIN & LAURETH-7

\*\*\* XANTHAN GUM & LECITHIN & SCLEROTIUM GUM & PULLULAN

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## MULTIFUNCTIONAL

- Gelling and texturing
- Thickening and suspending
- Co-emulsifier and stabilizer

## EASY TO USE

- Pre-dispersed liquid form
- Before or after emulsification
- No neutralization
- Cold/hot process

## RESISTANT

- Suitable for acidic formula
- Good electrolytes tolerance
- Compatible with pigments and solvents
- Stable under temperature stress

## NATURAL

- Traditional Japanese Food Ingredient
- ISO 16128 Natural-Derived Index 1

## SENSORIAL

- Enhanced skin feel and penetration
- Synergetic effects of components

## INCI

Glucomannan  
& Polyglyceryl-4  
Laurate  
& Caprylic/Capric  
triglyceride  
& Xanthan Gum

## Shelf-life

4 years

## Use level

0.5-2%

## pH range

4-7

## Pack size

5 kg

*The information contained in this brochure is based on our current knowledge and should not be used to commercialize products to consumers. The samples provided are only for experimental use and not for resale.*



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**IK INABATA**