FVC-INS40
(Viscocare INS40F)

For Cosmetics/Personal care

Emulsion Thickening polymer

FTC korea

Content

1. Profile
2. Property & Benefit
3. Specification
4. Thickening capability test

   (Water / pH range / Electrolyte/ Solvent)
5. Application

Profile

FVC-INS40

Item	Polymer	Oil	Emulsifier
INCI Name	Hydroxyethyl acrylate & Sodium acryloyldimethyltaurate copolymer	Isohexadecane	Polysorbate 60
CAS No	111286-86-3	4390-04-09	9005-67-8
EINECS No	601-067-4	224-506-8	500-020-4
CHINA	listed in IECIC		
Physical form	Pre-neutralized emulsion Liquid		

Property & Benefit

FVC-INS40

- Is a flowable emulsion-type composition consisting of Acryl polymer, Isohexadecane and Polysorbate 60.
- Is very easy to use, just add to your formulation after mixing oil and water phases to enhance stability and modify rheology.
- Is convenient emulsifier, rheology modifier, thickener, and acting as a stabilizer.
- Add at all stages of the process, even cold & hot process is possible, and there is no need for neutralization before use
- Acts as a conditioning agent for the hair and prevents static electricity to facilitate hair care.
- Self-emulsifying and emulsifying up to 40% of oil
- Is possible to increase the viscosity in the pH range of 3.0-10, and it has excellent resistance to electrolyte and thickening power.
- Sensory profile :

  - Fresh, melt on contact with the skin, - Rapidly absorbed by the skin, - light, non-tacky touch.

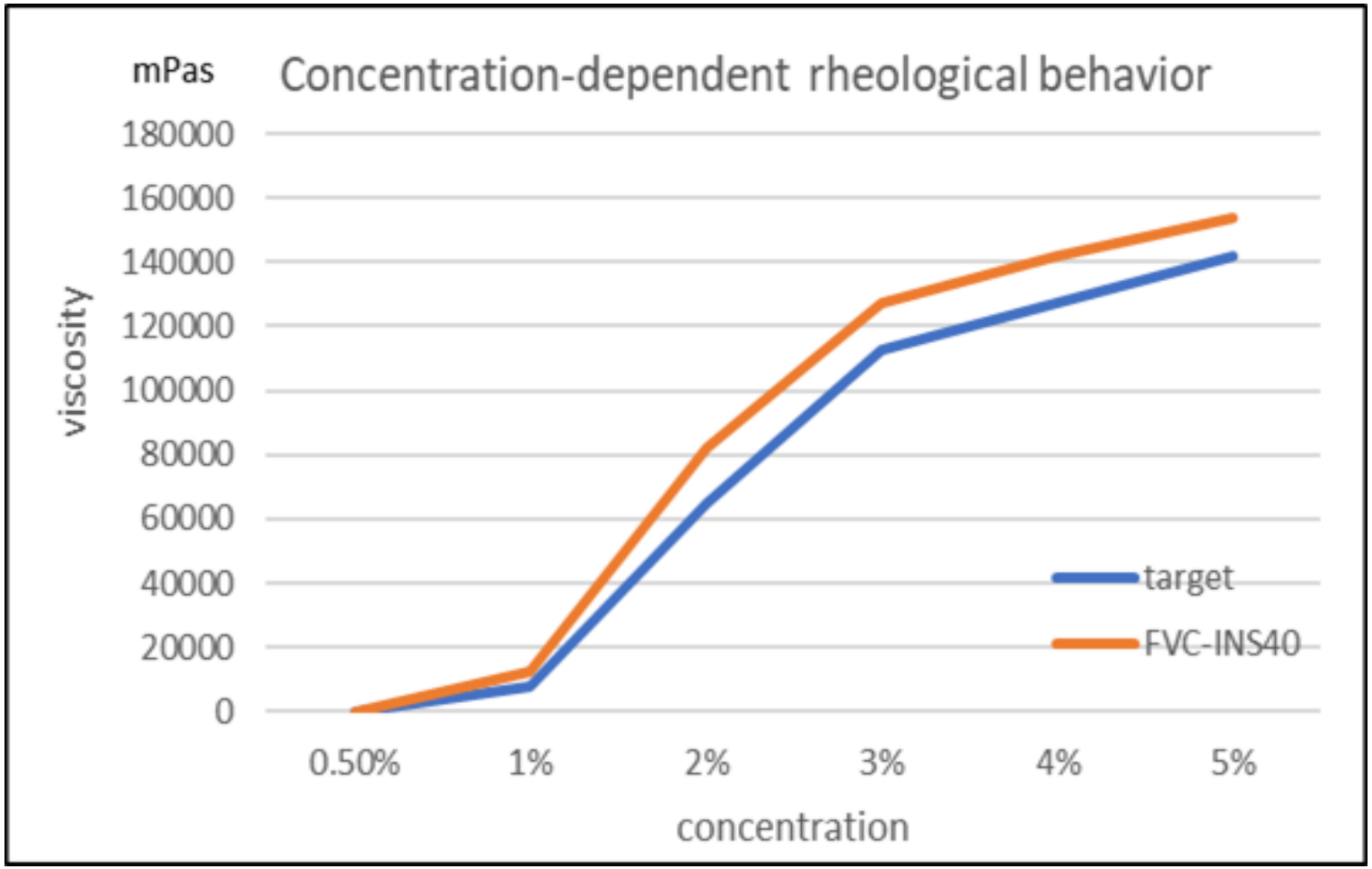
Specification

Specification of FVC-INS40

Property	Unit	Specification	Method
Appearance	-	Fluid emulsion	Visual
Odor	-	Characteristic	Sensory
Direct Viscosity	mPa.s	1,000 ~ 5,000	RVT, no3, 20rpm
Viscosity @3.0%	mPa.s	90,000 ~ 130,000	RVT, no6, 5rpm
pH @3.0% Sol'n	-	5.0 ~ 7.0	pH meter
3% Salt Viscosity(0.1%NaCl)	mPa.s	4,000 ~ 12,000	RVT, no4, 5rpm

Thickening capacity

Viscosity curve with concentration in DI Water



- **Objectives**

-Measure the viscosity at various concentrations and compare it to a benchmark

- **Methods**

-Prepare solution of 0.5 – 5.0 % of FVC-INS40.

-Using automatic agitation in low concentration

-In high concentration, using manual agitation

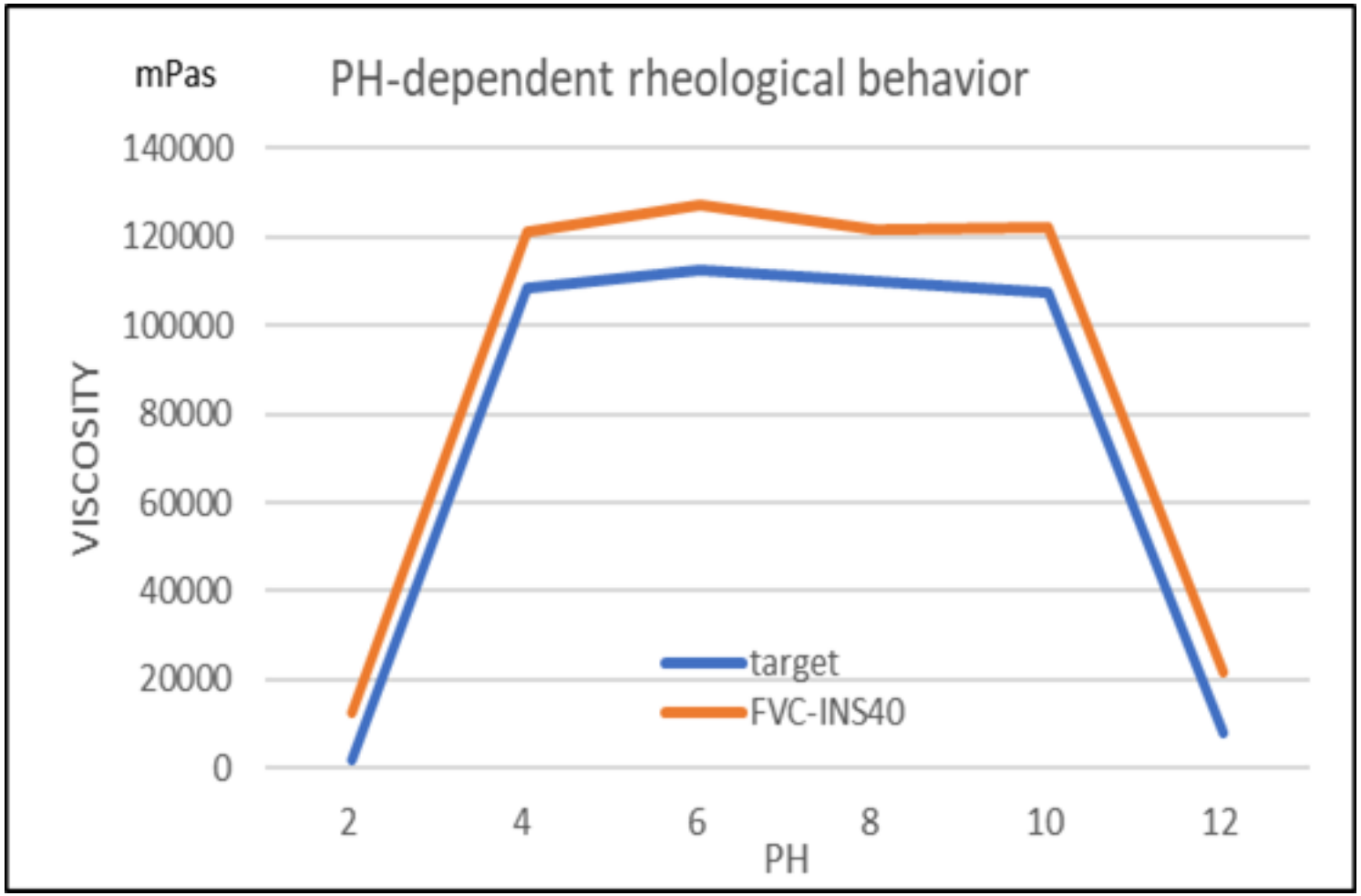
-RVT Viscometer

- **Result**

-The viscosity profile of FVC-INS40 at various concentrations is very similar to the benchmark one

Thickening capacity

Thickening capacity over a wide pH range



- **Objectives**

-To check the viscosity according to the pH change and compare it with the benchmark

- **Method**

-3% FVC-INS40 solution in DI Water

-Add Lactic acid or 10%NaOH solution drop by drop to 3% FVC-INS40 solution.

- **Measure the viscosity and pH**

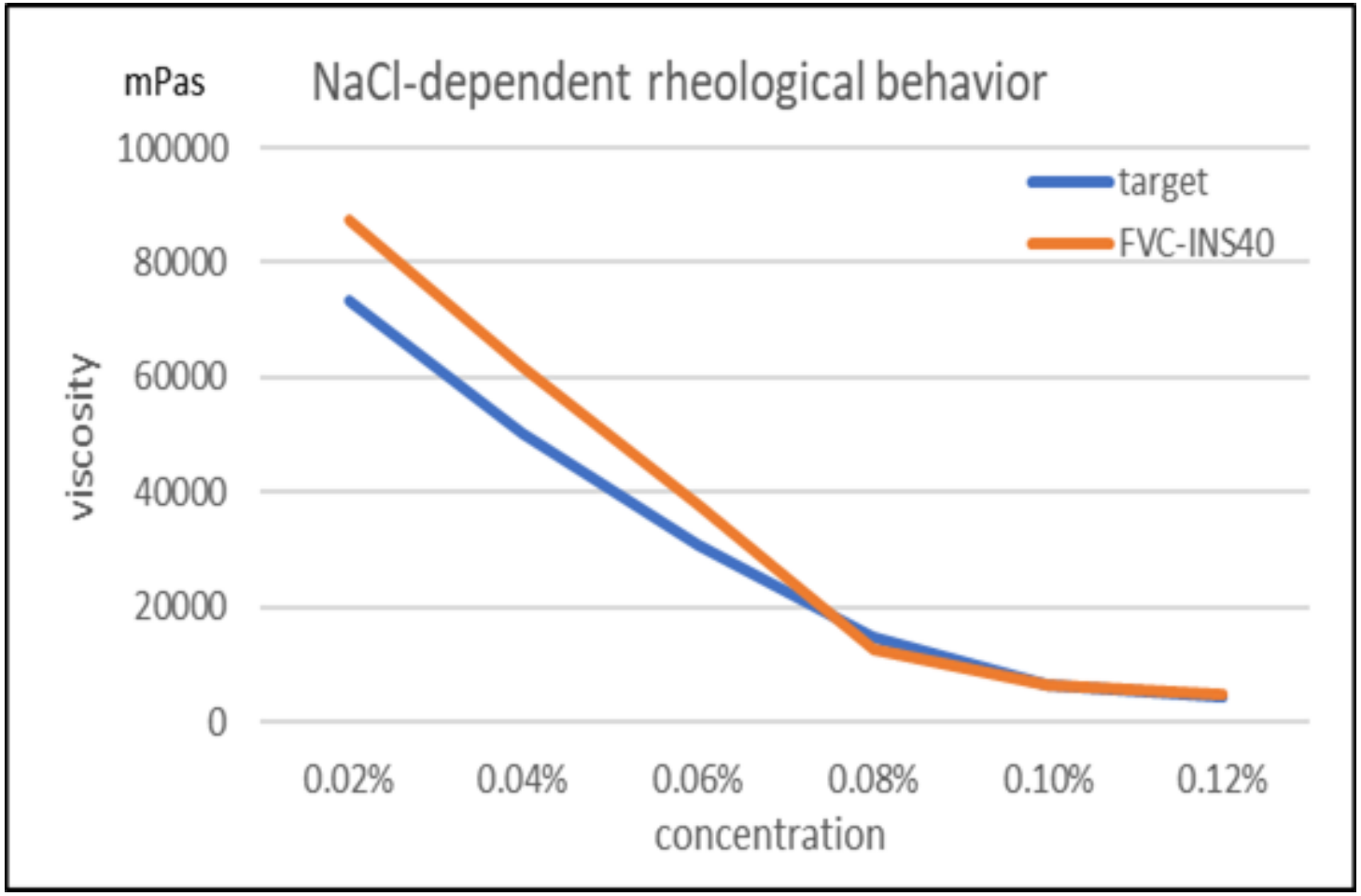
- **Test Result**

-Trend of viscosity variation is very similar

-Maintain high viscosity from pH 3 to 10 (wide range)

Thickening capacity

Thickening capacity in presence of electrolytes



- **Objectives**

- For the purpose of checking the viscosity resistance to the electrolyte

- **Methods**

- Prepare 3% FVC-INS40 solution in DI water

- Add various weight of NaCl to 3% FVC-INS40 solution.

- Mix well and measure the viscosity.

- **Test Result**

- Decreasing trend of viscosity is similar

Application

- Foundations, colored gels
- Sun and after-sun products
- Mascaras
- Cleansing lotions
- Baby lotions
- Skin care products
- Products with heat-sensitive or pH-dependent active ingredients
- Skin whitening products
- Self-tanning products
- Bleaching agents
- Hair coloring products
- Gel-creams, emulsion-gels, etc.

THANK YOU!

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