

Technical Information

Luvigel® EM

PRD 30071072

Valid since 16.07.2019
Revision 4.0

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Care Chemicals

Emulsifying Polymer / Rheology Modifier

INCI name(s)

Caprylic/Capric Triglyceride (and) Sodium Acrylates Copolymer

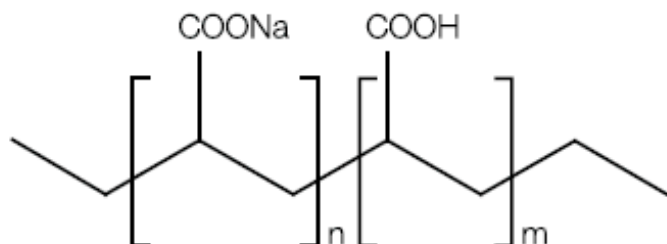
Chemical description

Caprylic/Capric Triglyceride, Sodium Acrylates Copolymer

Physical form:

Emulsion

Structural Formula



CASR-No.

73398-61-5
9003-04-7

Ingredient

Glycerides, mixed decanoyl and octanoyl
2-Propenoic acid, homopolymer, sodium salt

Characteristic values

The specifications stated in the paragraphs 'Quality control data' and 'Additional product descriptive data' finally and conclusively describe the properties of the product.

Quality control data

(Data which is used for quality release and is certified for each batch.)

Test property	Specification	Test method
Appearance	White to slightly yellowish w/o emulsion	PM/01055
Odor	Characteristic	PM/01340
Viscosity (Brookfield, RVT, Sp. 4, 20 rpm, 23 °C)	3000 - 10000 mPas	PM/00744
Non volatile matter (3 h, 140 °C)	49.0 - 52.0 g/100 g	PM/01074
Content of Polymer	23.0 - 27.0 g/100 g	PM/01543

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Care Chemicals**Typical values**

(For information purposes only, not part of the guaranteed specifications.)

Property	Value
pH	6 - 7

Storage information**Shelf life**

30 months

Storage temperature

Between + 5 °C and + 30 °C

Storage conditions

In original sealed containers and protected from moisture

Additional informationStorage temperature ≤ 0 °C leads to the following phenomena: Coagulation (Instability), loss of effectiveness which is irreversible.**Stabilising additives / Auxiliaries****Preservatives**

not present

Antioxidants

not present

Solvents

not present

Others

approx. 0.2 % Cereareth-6, Stearyl Alcohol

approx. 1.0 % Sorbitan Oleate

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Care Chemicals**General information****Raw material basis**

Synthetic: (mineral oil / natural gas)

Composition hints for finished product label**INCI Components****INCI Name (US/EU/CN)**Sodium Acrylates Copolymer
Caprylic/Capric Triglyceride**Content**23 - 27 %
24 - 25 %**Water Content****Content**

48 - 51 %

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Care Chemicals

Miscellaneous information

Recommended concentration

It is recommended to use Luvigel® EM in concentrations of 1.0 - 2.5 % in cosmetic formulations.

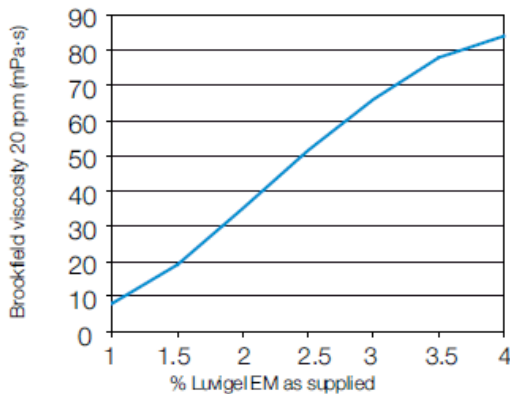


Fig. 1: Viscosity as a function of Luvigel® EM concentration (formulation: aqueous gel)

The thickening effect (Fig. 1) of Luvigel® EM lies in the 10000 - 20000 mPa.s range. A concentration of 2.5 % gives a viscosity of about 50000 mPa.s. A further addition rises the viscosity to the 80000 - 100000 mPa.s range.

pH-value

Over a pH range of 6 - 9, the viscosity lies between 30000 and 40000 mPa.s (Fig. 2)

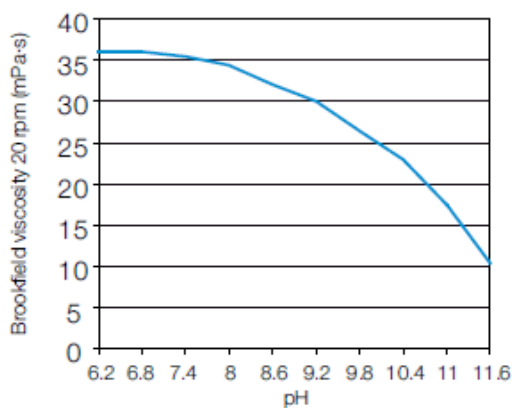


Fig. 2: Viscosity of a 1 % aqueous gel as a function of pH

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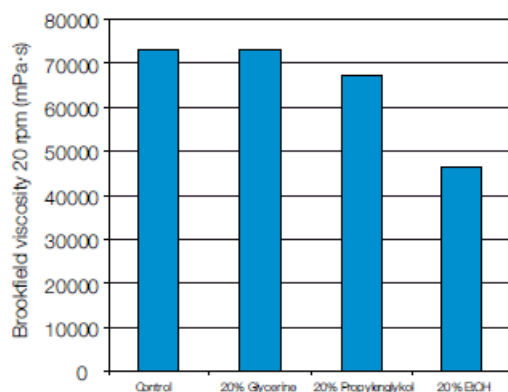
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Care Chemicals**Stability to salts**

In common with other thickeners, Luvigel® EM is sensitive to electrolytes.

Compatibility with solvents

Quantities of 20 % (w/w) ethanol, 1,2-propylene glycol and glycerine were added to a 3 % aqueous gel (Control gel Fig. 3), and its viscosity was determined.

**Fig. 3: Effect of polar solvents on the viscosity of a 3 % aqueous gel**

Glycerin has no effect on the viscosity, while ethanol reduces it.

Example of use

Thickener for the production of cosmetic products.

Intended for use as cosmetic ingredient**Disclaimer**

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