



TDS

Specialize in best organic
Preservative

BGMCY-800N

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Certificated by RSPO/ECOCERT



General Information

BGMCY-800N is a multi-functional cosmetic material manufactured by estering, 100 raw material extracted from plant.

That makes it a natural source, 100% biodegradable ingredient for cosmetic and food industry applications. Glyceryl Caprylate versatile ingredient used widely in the surfactant personal care and cosmetic industry. It appears as a clear agent that has a low viscosity.

The primary functions of BGMCY-800N(Glyceryl Caprylate) are providing hydrating, emulsifier that helps to blend oils and water as well as anti-microbial properties. It also improves the spreadability of the products and gives the surface of the skin a rich velvety feel. Glyceryl Caprylate's emollient properties don't lead to skin pore blockages, rendering it non-comedogenic. This aspect is particularly advantageous for individuals prone to acne or clogged pores.

Further, owing to soluble in alcohol and diol, this ingredient enhances the shelf life with other ingredient so that preservative booster enhance.

It can play a role as surfactant that is soluble in natural oil and mineral oil , not only be used in cosmetics but used in diverse cleaning solvency agent such as soap, cleanser. It dissolves easily in products and water-soluble alcohol with surfactant.

Advantage

Great emulsifier

Emollient

Skin sensation

Antimicrobial effect

Soluble in alcohol and oil

Derived from Natural ingredients

Ecocert certification

Suitable for acne skin

Application

Surfactant

Preservatives booster in Fundamental cosmetics

Sensitive skin care

Bath product

Chemical Information

MSDS Name

Octanoic acid, monoester with glycerol

INCI Name

Glyceryl Caprylate

Cas number/EC number

26402-26-6/247-668-1

Molecular Formula

$C_{11}H_{22}O_4$

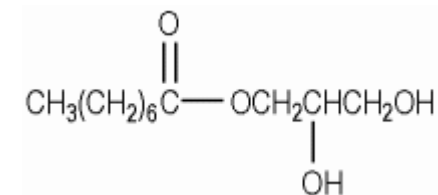
Molecular Weight

218.29g/mol

B.P/M.P(°C)

296/38.7

Chemical Structure



Specification

Test items

Appearance

Odor

Purity

Moisture

Safety notice

Allergy/irritation effect may vary from person to person
Acne or clogged pores may vary from person to person

Recommended Dosage

0.3~0.5%

Packing & Shelf Life

25kg can type

2 years from manufacturing date

MOQ

450kg with a pallet

Storing method

Should be stored in the air-tight
in original sealed container indoors between 15 and 25 °C
Low temperatures may lead to solidification may require
that product to be gently warmed
Excessive heat may cause accelerated degradation.

Limits

Colorless clear liquid

Characteristic, Mild

Not less than 88.0%

Not more than 1.0%

Reference

Table 2. D₇¹⁾ Results of Preservative Efficacy Testing

| l-monoglyceride Concentration (%) | Inhibition rate (%) | |
|-----------------------------------|---------------------|-------|
| | Bacteria | Fungi |
| C ₁₂ | 0.25 | 93.10 |
| | 0.50 | 94.14 |
| | 1.00 | 94.94 |
| C ₈ | 0.25 | 96.28 |
| | 0.50 | 98.61 |
| | 1.00 | 99.43 |

¹⁾ D₇: 7 days after inoculation

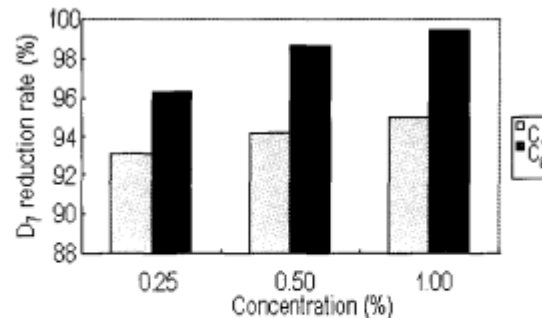


Figure 1. Comparison of preservative efficacy against fungi by C₈ (glyceryl caprylate) and C₁₂ (glyceryl laurate). The line indicates the minimal criteria for fungi adopted in our company. D₇: 7 days after inoculation.

Method

Visual inspection

Sensory evaluation

GC Chromatography

Karl-Fischer

Table 3. Results of the Preservative Efficacy Testing

| l-Monoglyceride | pH | Inhibition rate (%) | |
|---------------------|------|---------------------|-------|
| | | Bacteria | Fungi |
| C ₈ 0.0% | 7.20 | NI ¹⁾ | NI |
| | 5.16 | NI | NI |
| C ₈ 0.3% | 7.42 | 100.00 | 96.69 |
| | 4.88 | 100.00 | 99.17 |

¹⁾ NI: No inhibition

Table3

When Glyceryl Caprylate 3% added to the formulation, it shows high antimicrobial effect in PH both neutral and acidity

Table2/Figure1

Glyceryl Caprylate 0.25% is more high efficacy in inhibition of Bacteria and Fungi than Glyceryl laurate.



Do our Best, Be the Best!

Company Detail

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Reference Source

P 3-4 A Study on the Antimicrobial effect of Glyceryl Caprylate in Cosmetics