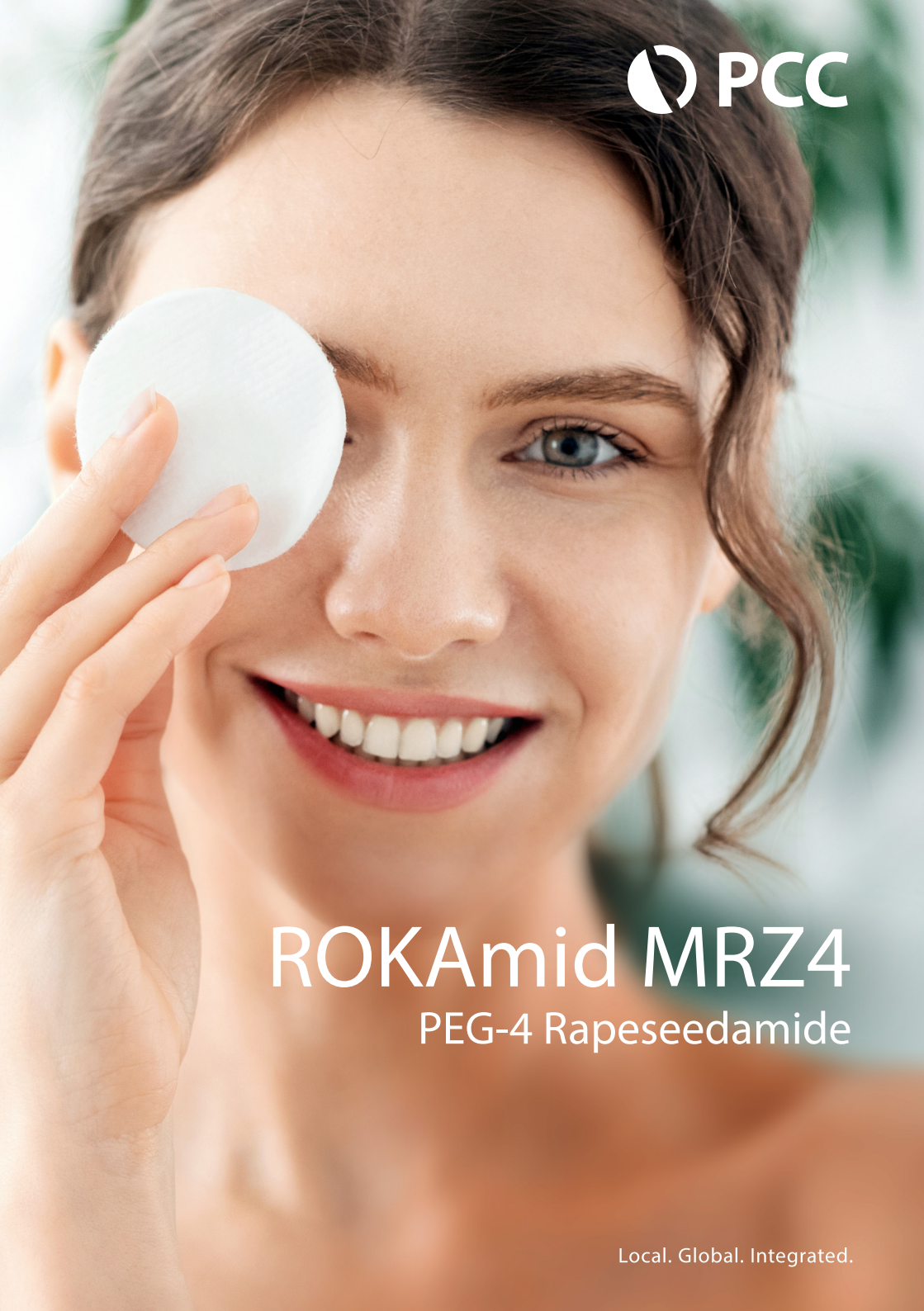


# ROKAmid MRZ4

## PEG-4 Rapeseedamide

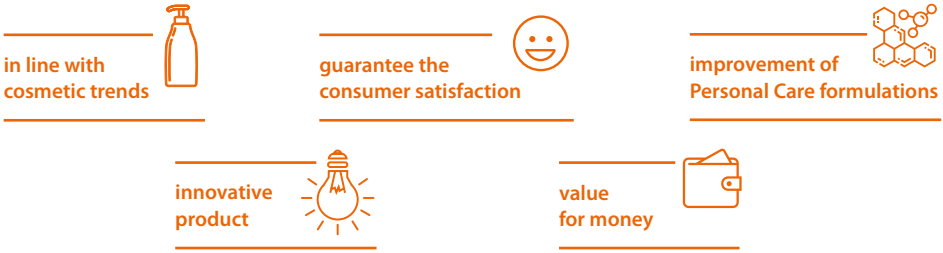
Local. Global. Integrated.

## Description

- high concentration
- high performing and cost-effective thickening agent
- acts as a foam booster, strong solubilizer and emulsifier
- effective in both SLES-based and SLES-free formulations
- based on renewable rapeseed oil
- good biodegradability
- easy to handle due to its low viscosity
- can also be formulated at room temperature

## Application

- shampoos
- shower gels
- hand soaps
- shaving gels
- hair styling preparations
- hair dyes




# ROKAmid MRZ4

## PEG-4 Rapeseedamide

| | | |
|---|---|---|
| Chemical name | Rapeseed oil fatty acids monoethanolamide, ethoxylated | |
| INCI name | PEG-4 Rapeseedamide | |
| CAS number | 85536-23-8 | |
| Function | Thickening agent, foam booster, solubilzer, emulsifier | |
| Technical requirements | Appearance at temperature (20÷25)°C | liquid |
| | pH of 1% solution | 9.2 ÷ 10.2 |
| | Water, %(m/m) | 6.5 ÷ 8.5 |
| | Color in Gardner scale (20÷25)°C | max. 5 |
| | Free MEA, %(m/m) | max. 1.4 |
| General data | Density at 25°C, g/mL | 1.00 |
| | Solubility | dispersible |
| | Solidification point, °C | approx. 0 |

# Make-up removing gel [KD-203]

| Phase | INCI name | Brand name | Concentration [%] | Function |
|---|---|---|---|---|
| A | Aqua | – | 22.50 | solvent |
| A | Glycerin | – | 0.30 | solvent |
| B | Paraffinum Liquidum | – | 2.40 | emollient |
| **B** | **Cetearyl Alcohol** | **EXOalc 1618 flakes** | **1.80** | **thickener** |
| **B** | **Ceteareth-20** | **ROKAnol T20** | **1.20** | **emulsifier** |
| **C** | **PEG-4 Rapeseedamide** | **ROKAmid MRZ4** | **4.00** | **surfactant** |
| C | Parfum | – | 0.50 | fragrance |
| C | Sodium Benzoate, Potassium Sorbate | – | 0.50 | preservative |
| C | Hexylene Glycol | – | 3.00 | solvent |
| D | Acrylates/C10-30 Alkyl Acrylate Crosspolymer | – | 61.60 | rheology modifier |
| **D** | **PPG-15 Stearyl Ether** | **ROKAnol SP15L** | **1.80** | **emollient** |
| E | Sodium Hydroxide | – | 0.40 | pH modifier |

| | | |
|---|---|---|
| **Appearance** | visual method | white gel |
| **pH** | | 6.0 – 6.5 |
| **Stability** | 1 month in 5°C, 20°C, 40°C | confirmed |

## Procedure:

1. Add water and glycerin into the main vessel and heat up to 80°C while mixing.
2. Combine ingredients from phase B in a separate vessel and heat up to 80°C and add to main vessel. Mix it until homogenous emulsion is obtained at 80°C.
3. Cool the batch down to 60°C while mixing and homogenize with 3000 RPM for 1 min.
4. Combine ROKAnol SP15 and Acrylates/C10-30 Alkyl Acrylate Crosspolymer and add into a main vessel. Homogenize with 3000 RPM, 60 sec.
5. At 40°C add gradually combined phase C and mix it.
6. Add Sodium Hydroxide and homogenize with 3000 RPM for 30 sec. Cool down to 25°C.

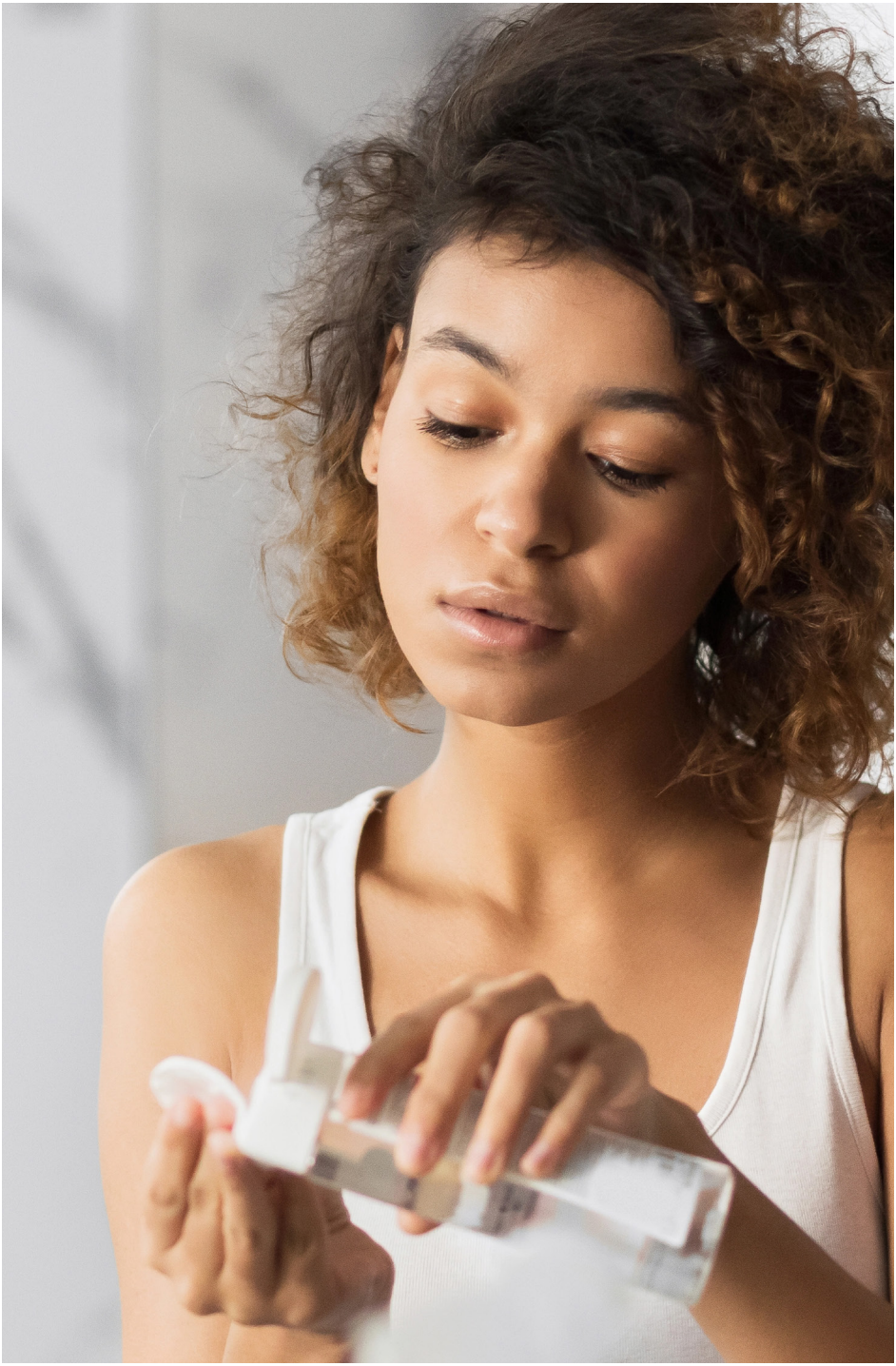
# Micellar cleansing liquid [KD-205]

| Phase | INCI name | Brand name | Concentration [%] | Function |
|---|---|---|---|---|
| A | Aqua | – | 81.00 | solvent |
| **A** | **PEG-40 Hydrogenated Castor Oil** | **ROKAcet HR40W** | **8.00** | **surfactant** |
| A | Parfum | – | 0.20 | fragrance |
| A | Sodium Benzoate, Potassium Sorbate | – | 0.50 | preservative |
| **A** | **PEG-4 Rapeseedamide** | **ROKAmid MRZ4** | **4.00** | **surfactant** |
| A | Hexylene Glycol | – | 6.00 | solvent |
| A | Citric acid | – | 0.30 | pH adjuster |

| | | |
|---|---|---|
| **Appearance** | visual method | transparent liquid |
| **pH** | | 4.5 – 5.5 |
| **Stability** | 1 month in 5°C, 20°C, 40°C | confirmed |

## Procedure:

**1.** Add all ingredients from phase A into one vessel and mix until homogenous solution is obtained.



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