

# **OLEAMULS® WO**

INCI Polyglyceryl-6 Pentaoleate CAS 104934-17-0

## **SPECIFICATIONS**

Viscous oily liquid **Appearance** Color Amber Odor Characteristic 6.0 - 8.0Hq 95 - 97% Dry residue 5 max. (mg KOH/g) Acid number Saponification number 155 - 1756 (Experimental) HIB 3 – 8% (as sole emulsifier) Dosage level:

# **GENERAL INFORMATION**

Oleamuls® WO is an non-ionic water in oil emulsifying system obtained from the esterification of olive oil's fatty acids and represents the better alternative to the common PEG emulsifiers. It forms a lattice of liquid crystals within the emulsion making it look smooth and glossy in appearance with a soft and light feel, unusual in water in oil systems.

Oleamuls WO® is palm-free and environmentally-friendly because, as a liquid, it requires less energy during processing (cold processing). It is easy to use and effective at dispersing pigments and sun filters.

Oleamuls WO® is extremely well tolerated by the skin and thus very interesting for the formulation of baby care products. It decreases the TEWL and has a regenerative and protective effect on the natural skin barrier.

## **FORMULATION & RECOMMENDATIONS**

It generally requires more mechanical energy to prepare a WO emulsion than it does to make an OW emulsion.

The emulsifier's liquid form simplifies the emulsification operation significantly, as it can be carried out at a low temperature (cold processing).

The recommended procedure is as follows

- 1. Add the emulsifier to the oleaginous phase. If it contains solid ingredients, heat it until it attains clarity.
- 2. Heat half of the aqueous phase to about 50°C.
- 3. Add the heated portion of the aqueous phase to the oleaginous phase, pouring it in in a gradual, thin stream, with interruptions, while stirring constantly with the turbo-emulsifier.
- 4. Subsequently add in the second portion of the aqueous phase, the preservative system, the active ingredients and the fragrance.
- 5. Continue to apply the combined action of the counter-rotating turbine/turbo-emulsifier for a few minutes.

### **BENEFITS**

- Non-ionic emulsifier, made from plant-derived raw materials, Palm Oil-free.
- Thanks to the liquid-crystal structures it is possible to have stabilization of the emulsion viscosity even in presence of lipid phases with different polarities.
- Effective at dispersing pigments and sun filters.
- The emulsion obtained is smooth and glossy in appearance with a pleasantly light feel and emollient property.

• Easy to use at low temperatures (cold processing), soluble in ethanol, mineral and vegetal oils, fatty acids, fatty alcohols and their derivatives.

# **APPLICATIONS**

#### Cosmetics

- Moisturizing creams and creams for children
- Sensitive skin and baby care products
- Sun care and after-sun products
- Foundations for make-up

This product is not available in Germany, UK, Italy, USA, India

# **PACKAGING & SHELF LIFE**

## Available packaging

20 kg drums / 200 kg drums / 1.000 kg IBC

#### Shelf life

Under proper storage conditions the shelf life is 36 months.

## **REGULATORY**

ECOCERT/COSMOS NATRUE NATURALITY INDEX (according to ISO16128) Approved Allowed 1 (derived natural)











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