

POLYSOL® PGA

INCI Polyglyceryl-6 Caprylate (and)
Aqua (and) Proline

SPECIFICATIONS

Appearance	Clear oily liquid
Color	Light yellow / amber
Odor	Soft, characteristic
pH	5.5 – 7.5
Dry residue (105°C)	66 – 72%
HLB	15 (Experimental)

GENERAL INFORMATION

POLYSOL® PGA is an innovative natural solubilizer as an alternative to PEGs.

It is well-suited for the solubilization of essential oils, vitamins and liposoluble active ingredients. POLYSOL® PGA can enhance the fragrance persistence on the skin for a long period due to absence or limited quantities of alcohol and has no negative effects on foaming properties when mixed to surfactants.

In neither "in vitro" nor human trials did POLYSOL® PGA manifest any detectable sensitizing effects; it can be considered hypoallergenic.

BENEFITS

- 100% plant-derived and palm-free
- No impact on the odor and color of final formulations.
- Easy to use, it works well across a wide range of pH values and provides moisturizing properties.
- It can enhance the fragrance persistence on the skin for a long period due to the absence or limited quantities of alcohol.
- No negative effects on foaming properties when mixed with surfactants.

FORMULATION & RECOMMENDATIONS

The technique used for the trial called for the substance to be solubilized to be added to 10 grams of POLYSOL®PGA and, after thoroughly mixing the two products while heating them slightly (35°C), a portion of the water, slightly heated, was added while stirring constantly.

The solution thus obtained was then added to the remaining portion of cold water.

Trials usually began with a ratio of solubilizing agent to material to be solubilized of 10:1. The quantity of solubilize was increased progressively or decreased depending on the results obtained, so as to establish the maximum amount of material that could be completely solubilized by 10 grams of solubilizer. Solutions thus obtained can be sterilised at 120° C. In the event that separation should occur, simply stir the solution while

it is still hot to reverse the process.

In order to determine the minimum amount of POLYSOL®PGA required to obtain the desired result, it is useful to know how to use the product properly. By nature it acts as a skin moisturising agent and, when added to cleansing formulations, it can increase the gentleness of the final formulation. When mixed with surfactants, no negative effects on foaming properties have been observed. It is easy to handle and has no negative effect on the odour or colour of final formulations. If you wish to solubilize a liposoluble substance in an aqueous medium, you must mix the POLYSOL®PGA directly into the lipophilic ingredients while heating them slightly if the operation proves difficult. Add the water in gradually while stirring constantly. If a gel forms, part of the water may be heated before being added in.

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}

APPLICATIONS

- Cleansing
- Sun care
- Oral care
- Hair care
- Wet Wipes
- Perfumes

