

## NATISOL®

Your green solubilizer



### FOCUS INFO

#### INCI NAME

Cocoyl Proline

#### SPECIFICATIONS

Appearance:	clear liquid
Color:	from colorless to straw yellow
Odor:	odorless
Dry residue (at 105°):	55 - 65%
pH:	6.0 - 7.5
Suggested dosage:	0.1 - 5%

#### COSMETIC APPLICATIONS

- Transparent cleansers
- Makeup removers
- Micellar waters
- Toiletries and perfumes

### DESCRIPTION

Lipoaminoacidic **eco-solubilizing** agent derived from coconut fatty acids and proline.

It's particularly suitable to **solubilize essential oils and fragrances** for toiletries and perfumes, as it substitutes ethoxylated surfactants normally used in cosmetic products.

It is recommended to formulate transparent personal care products, especially makeup removers and micellar waters, as toxicity test showed that it is not **irritant for human corneal epithelium**.

### PROPERTIES

- Natural substitute of ethoxylated surfactants
- Cosmos certified
- Foaming enhancer
- Biodegradable



VEGETABLE ORIGIN



SAFE PROFILE

\*Available also Chinese Inci name, listed in IECIC

## SOLUBILIZING PROPERTIES

Natisol® is able to completely solubilize essential oils creating perfectly clear solutions.

As every Essential Oil has a different behavior when added to water, the ratio (E.O.) : (Natisol®) depends on the composition of the essential oil.

ESSENTIAL OIL	E.O.%	NATISOL%	RATIO
MINT	0,2	2	1:10
EUCALIPTUS	0,2	1	1:5
LEMON	0,2	1	1:5

Solubilization Test performed by Turbidimetric Method .

In order to obtain higher clearness in finished products, the occasional addition of Salt (NaCl) from 0,5% to 1% in the aqueous phase could be useful to increase Natisol®'s solubilizing capacity.

As per Lavender, which is quiet difficult to solubilize in aqueous phase, we can have two possibilities:

ESSENTIAL OIL	NATISOL®	NATISOL® + NaCl 1%
LAVANDER	1:10	1:5

Solubilization Test performed by Turbidimetric Method

Natisol® can be used even to solubilize flavorings; in this case, Sodium Chloride helps to obtain a clear solution, keeping Natisol®'s quantity unvaried.

## MARINE BEAUTY MICELLAR WATER LSIN 7113c\*

INGREDIENTS	PHASE	%w/w
Aqua/Water	A	86,75
Disodium EDTA		0,10
Sodium Benzoate		0,20
Gluconolactone, Sodium Benzoate		1,00
Sodium Chloride		0,50
Citric Acid		0,50
Sodium Hydroxide	B	1,65
Red Alga Gel® (Ahnfeltiopsis Concinna Extract)	C	2,00
Phytoprotein AC (Vegetable Amino Acids)	D	1,00
Trealix® (Trehalose, Hydrolyzed Vegetrable Protein)		1,00 5,00
NATISOL® (Cocoyl Proline)	E	
Fragrance		0,30

### CHARACTERISTICS

Aspect:	transparent solution
Colour:	colorless
Odour:	characteristic
pH:	5.50 - 6.10
Brookfield viscosity	
SP 5 RPM 20:	0.980-1100 mPa.s

### METHOD

Weight and heat phase A at 60°C. Cool down at room temperature and add B until the pH is 5.6. Add C (under homogenizer to facilitate its dispersion), then add D.

Mix phase E alone, then add it to the formulation. Adjust pH if necessary.

\*Formulation tested in Sinerga Research Centre according to stability and laboratory manufacturing procedures.