



# EXOcare HTW1

Trideceth-9 (and) PEG-40 Hydrogenated  
Castor Oil (and) Aqua

Local. Global. Integrated.

## Description

- stabilization of oil-in-water emulsions
- biodegradable
- good tolerated by skin and mucous membranes
- ability to solubilize essential oils, fragrances and other oil substances

## Application

- shampoos
- baby bath gels
- gentle baby shampoos
- liquid soap
- haircare
- shaving foams
- shower gels
- face gels
- hair coloring and bleaching
- make-up and make-up removal

in line with  
cosmetic trends



guarantee the  
consumer satisfaction



improvement of  
Personal Care formulations



innovative  
product



value  
for money



## EXOcare HTW1

### Trideceth-9 (and) PEG-40 Hydrogenated Castor Oil (and) Aqua

Chemical name	Alcohols, C13, branched, ethoxylated and castor oil, hydrogenated, Ethoxylated, water solution	
INCI name	Trideceth-9 (and) PEG-40 Hydrogenated Castor Oil (and) Aqua	
Function	Blend of non-ionic surfactants. The product is used primarily as a solubiliser	
Technical requirements	Appearance at temperature (20÷25)°C	liquid
	Colour in Hazen scale 40°C	max 150
	pH of 5% solution	5 ÷ 7
	Water, %(m/m)	8 ÷ 10
General data	Solubility in water	good
	Solidification point, °C	approx. -4
	Density at 25°C, g/mL	approx. 1.04
	Viscosity at 25°C, cP	below 1000

## Cleaning micellar lotion

Phase	INCI name	Brand name	Concentration [%]	Function
A	Aqua	–	84.96	solvent
A	Sodium Benzoate	–	0.25	preservative
A	Potassium Sorbate	–	0.25	active
B	Poloxamer 184	EXOmer L64	3.00	surfactant
B	Trideceth-9 (and) PEG-40 Hydrogenated Castor Oil (and) Aqua	EXOcare HTW1	4.00	solubiliser
B	Glycerin	–	1.00	moisturizer
B	Propylene Glycol	–	6.00	solvent
B	Parfum	–	0.50	fragrance
B	Citric acid	–	0.04	pH adjuster

<b>Appearance</b>	visual method	transparent liquid
<b>pH</b>		4.8-5.5
<b>Stability</b>	1 month in 5°C, 20°C, 40°C	confirmed

## Procedure:

1. Aqua heat to 40 – 50°C. In main beaker mix aqua with Sodium Benzoate and Potassium Sorbate (phase A).
2. Add ingredients from phase B to the main beaker and mix.
3. Check pH, if necessary add more Citric Acid to 4.8-5.5.

## Cleaning facial foam wash

Phase	INCI name	Brand name	Concentration [%]	Function
A	Aqua	–	92.29	solvent
A	Betaine	–	0.25	active substance
B	Glycerin	–	1.00	moisturizer
C	Sodium Lauroyl Sarcosinate	ROKAtend LS	4.00	surfactant
D	Trideceth-9 (and) PEG-40 Hydrogenated Castor Oil (and) Aqua	EXOcare HTW1	2.00	solubiliser
D	Methylparaben, Ethylparaben	–	0.40	preservative
E	Citric acid	–	0.06	pH adjuster

<b>Appearance</b>	visual method	transparent liquid
<b>pH</b>		5.5-6.5
<b>Stability</b>	1 month in 5°C, 20°C, 40°C	confirmed

### Procedure:

1. Aqua heat to 40 – 50°C. In main beaker mix warm Aqua with Betaine (phase A).
2. Phase B add to phase A and mix.
3. Next add ROKAtend LS (phase C) and mix until clear solution is obtained.
4. In other baker mix phase D.
5. To the main baker add phase D and phase E.
6. Check pH, if necessary add more Citric Acid to 5.5-6.5.

## Men body foam with cooling effect

Phase	INCI name	Brand name	Concentration [%]	Function
A	Aqua	–	78.15	solvent
A	Sodium Benzoate, Potassium Sorbate, Aqua	–	0.50	preservative
B	Ammonium Lauryl Sulfate	ROSULfan A70	5.00	surfactant
B	Glycerin	–	1.50	moisturizer
B	Caprylyl/ Decyl Glucoside	–	4.00	surfactant
B	Trideceth-9 (and) PEG-40 Hydroge- nated Castor Oil (and) Aqua	EXOcare HTW1	0.50	solubiliser
C	Menthyl Lactate	–	1.00	refreshing
C	Propylene Glycol	–	4.00	solvent
D	Cocamidopropyl Betaine	ROKAmina K30	5.00	surfactant
D	Parfum	–	0.25	fragrance
D	CI 42090	–	0.10	dye
D	Lactic Acid	–	for pH 4.7-5.5	pH adjuster

Appearance	visual method	blue liquid
pH		4.7-5.0
Stability	1 month in 5°C, 20°C, 40°C	confirmed

## Procedure:

1. In main vessel combine ingredients from phase A - mix until uniform.
2. Next add ROSULfan A70 and mix.
3. Add Glycerin and Caprylyl/Decyl Glucoside, mix.
4. In next step add EXOcare HTW1 and mix.
5. In separate vessel mix Menthyl Lactate with Propylene Glycol (phase C) until uniform.  
Next add it to main vessel and mix.
6. Add ROKAmina K30 and mix until uniform.
7. Add Parfum and Pigment, mix.
8. Control the pH range – if necessary, add Lactic Acid for pH 4.7-5.5.

## Make-up removing liquid

Phase	INCI name	Brand name	Concentration [%]	Function
A	Aqua	–	92.19	solvent
A	Betaine	–	0.25	active substance
B	Poloxamer 184	EXOmer L64	0.20	surfactant
B	PEG-6 Caprylic/Capric Glycerides	ROKAcet CC6	4.00	surfactant
B	Glycerin	–	1.00	moisturizer
C	Trideceth-9 (and) PEG-40 Hydrogenated Castor Oil (and) Aqua	EXOcare HTW1	1.00	solubiliser
C	Parfum	–	0.30	fragrance
C	Phenoxyethanol, Ethylhexylglycerin	–	1.00	preservative
D	Citric acid	–	0.06	pH adjuster

<b>Appearance</b>	visual method	transparent liquid
<b>pH</b>		5.5-6.5
<b>Stability</b>	1 month in 5°C, 20°C, 40°C	confirmed

## Procedure:

1. In main beaker mix Aqua with Betaine (phase A).
2. Phase B add to phase A and mix.
3. In other baker mix phase C.
4. To the main baker add phase C and add Citric Acid.
5. Check pH, if necessary add more Citric Acid to 5.5-6.5.

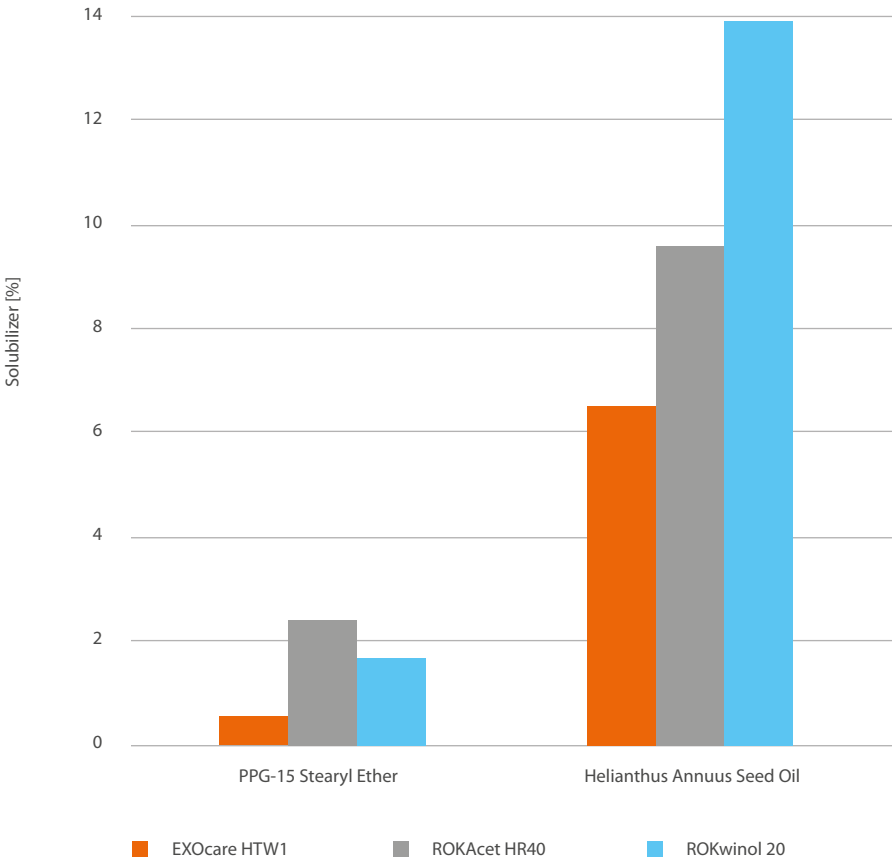
# Solubilization test

Solubilizers make it possible to dissolve insoluble or hardly soluble substances, such as fragrances, essential oils, fatty substances, in an aqueous medium. These substances are mainly used in products in which the main ingredient is water or when there is a low alcohol content in the solution. Solubilizers form a dispersion, so that finished products do not require mixing or shaking before use. They are mainly used in

formulations such as makeup removers, tonics, gels, body and hair care products.

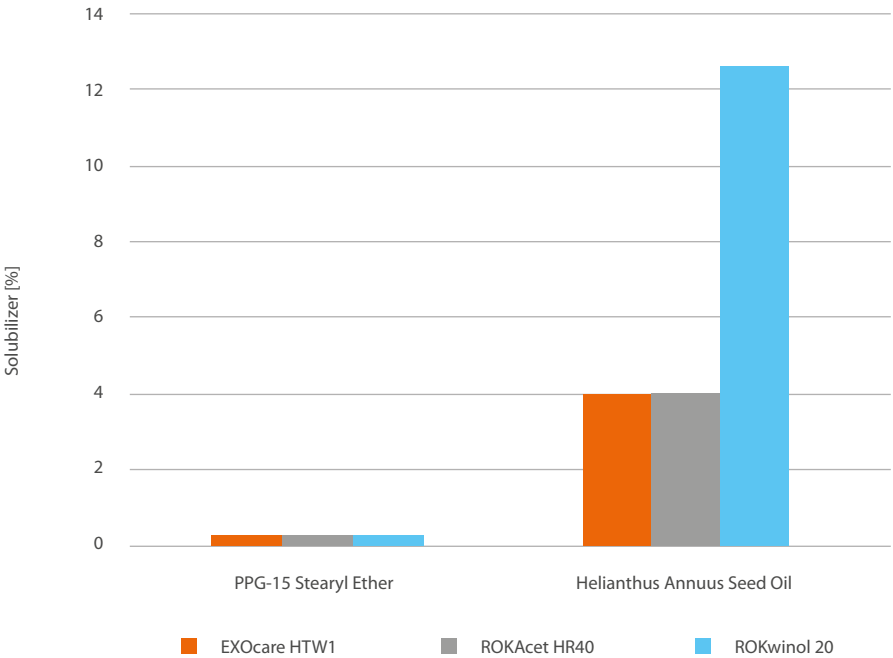
Solubilization test determining the amount of solubilizer needed to introduce 0.5% of water-insoluble components to obtain a clear mixture.

Input system: Insoluble substance – Solubilizer – Water



Solubilization test determining the amount of solubilizer needed to introduce 1% of water-insoluble component into formulation and obtain a clear

mixture.  
Input system: Insoluble substance – Solubilizer – Water-Surfactants









This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



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The suggestions for product applications are based on our best knowledge.

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