

AUTOCARE FORMULATION WASHING AND CARE OF VEHICLES



TABLE OF CONTENTS:

Introduction Car shampoo Economic car shampoo Insecticide Paste for chromed elements Car carpet cleaner Preparation for cockpit cleaning Preparation for washing rims (bloody rim) Preparation for rim cleaning - low pH Windscreen washer fluid Leather upholstery cleaner



Introduction:

Autocare chemicals are a dynamically growing segment of the industrial and consumer cleaning sector. The used products satisfy the requirements of both the users who prefer to clean their cars on their own and the car cleaning and maintenance companies with hand or automatic car wash points.

The autocare sector requires the use of many specialised cleaning mixtures and vehicle maintenance agents. The ingredients used for such mixtures are based on:

- Level of product sophistication
- Application: hand or automatic car washes
- The role of a particular ingredient
- Economical aspect
- Compatibility of ingredients
- Legal regulations

In the car cleaning and care segment, apart from the wellknown and conventional products, there are also preparations with properties suiting current market trends and growing customer requirements. They contain various advanced components fulfilling certain functions in the formulation. They make the finished products highly efficient and effective. Below we present some car cleaning and care sample formulations.

They are based on high-quality raw materials and chemical additives made at the PCC EXOL SA plants, the manufacturer of a wide range of industrial surfactants.

Car shampoo

	· 🖧
PRODUCT	PERCENTAGE SHARE
ABSNa 30	27.00 %
SULFOROKAnol L227/1	10.00 %
ROKAmina K40HC	5.00 %
Sodium carbonate	2.00 %
Sodium metasilicate	3.00 %
Polikarboksylat AMC60	2.00 %
Water	up to 100 %
APPEARANCE	white, milky liquid
DENSITY[20°C]	1.057 g/cm^3
VISCOSITY [cP] [20°C]	34.3 cP
рН	12.9

\odot	
PRODUCT	PERCENTAGE SHARE
ABSNa 30	27.00 %
SULFOROKAnol L227/1	10.00 %
ROKAmina K40HC	5.00 %
Sodium carbonate	2.00 %
Sodium metasilicate	3.00 %
Polikarboksylat AMC60	2.00 %
Water	up to 100 %
	white milley liquid
AFFEARANCE	white, milky liquid
DENSITY[20°C]	1.057 g/cm^3
VISCOSITY [cP] [20°C]	34.3 cP
рН	12.9

Preparation method (the process is carried out at room temperature)

Procedure:

- 1. Mix SULFOROKAnol L227/1 with half the required amount of water until it dissolves.
- 2. Next, add ROKAmina K40HC to the solution and mix it. Then add ABSNa 30 and mix until a homogeneous solution is obtained.
- 3. Prepare the other solution in a separate receptacle. Mix sodium carbonate and sodium metasilicate with the remaining amount of water. While mixing, add Polikarboksylat AMC60 and mix until a homogeneous solution is obtained.
- 4. Finally, introduce solution 2 in batches into the still mixing solution 1.





Economic car shampoo

	ー ど。
PRODUCT	PERCENTAGE SHARE
EXOcon B27	40.00 %
ROKAmina K40HC	5.00 %
Sodium carbonate	2.00 %
Sodium metasilicate	3.00 %
Polikarboksylat AMC60	2.00 %
Water	up to 100 %
APPEARANCE	yellow, opaque liquid
DENSITY [20°C]	1.055 g/cm3
рН	12.4

Preparation method (the process is carried out at room temperature)

Procedure:

- 1. First, mix EXOcon B27 with half the required amount of water until it dissolves.
- 2. Then add ROKAmina K40HC to the solution and mix until a homogeneous solution is obtained.
- 3. Prepare solution no. 2 in a separate receptacle. To this end, mix sodium carbonate and sodium metasilicate with the remaining amount of water. While mixing, add Polikarboksylat AMC60 to the remaining ingredients and mix until a homogeneous solution is obtained.
- 4. Finally, introduce solution no. 2 in batches into the still mixing solution no. 1.

Insecticide

کے	<u>ک</u>	2 5	
	PRODUCT	PERCENTAGE SHAR	E
	SULFOROKAnol L270/1	7.00 %	
	EDTA (40%)	3.00 %	
	Izopropanol	3.00 %	
	Water	up to 100 %	
	APPEARANCE	clear colorless liquid	
	DENSITY[20°C]	1.005 g/cm^3	
	VISCOSITY [cP] [20°C]	1.52 cP	

Preparation method (the process is carried out at room temperature)

Procedure:

рН

- 1. Mix isopropanol with water.
- 2. Next, add EDTA and mix.
- 3. Then add SULFOROKAnol L270/1 and mix for a long time at a high speed; do not heat up.





1.52 cP 12.3

Paste for chromed elements

Ā	
PRODUCT	PERCENTAGE SHARE
A dearomatized mixture of short chain hydrocarbons	30.00 %
ROKwin 80	10.00 %
ROKAnol NL9	5.00 %
ROKAnol IT9	10.00 %
Water	up to 100 %
APPEARANCE	white paste
DENSITY[20°C]	0.943 g/cm^3
VISCOSITY [cP] [20°C]	6.683 cP
рН	6.7

Preparation method (the process is carried out at room temperature)

Procedure:

- 1. Dissolve the non-ionic surfactants ROKAnol IT9, ROKAnol NL9 and ROKwin 80 in the entire amount of water and mix until a homogeneous solution is obtained.
- 2. Then, while continuously mixing, add the dearomatized mixture of short chain hydrocarbons in portions. Increase the mixer speed and mix until the paste becomes homogeneous.



Car carpet cleaner

PRODUCT PERCENTAGE SHARE ROKAnol L7 8.00 % ROKAnol LP3135 3.00 % Hydrotrope 3.00 % Citric acid (50%) 0.1 % Water up to 100 % APPEARANCE clear colorless liquid DENSITY[20°C] 1.005 g/cm^3 VISCOSITY [cP] [20°C] 2.31 cP pH 3.5	Ā	一 ふ ————
ROKAnol L7 8.00 % ROKAnol LP3135 3.00 % Hydrotrope 3.00 % Citric acid (50%) 0.1 % Water up to 100 % APPEARANCE clear colorless liquid DENSITY[20°C] 1.005 g/cm^3 VISCOSITY [cP] [20°C] 2.31 cP pH 3.5	PRODUCT	PERCENTAGE SHARE
ROKAnol LP3135 3.00 % Hydrotrope 3.00 % Citric acid (50%) 0.1 % Water up to 100 % APPEARANCE clear colorless liquid DENSITY[20°C] 1.005 g/cm^3 VISCOSITY [cP] [20°C] 2.31 cP pH 3.5	ROKAnol L7	8.00 %
Hydrotrope Citric acid (50%) Water3.00 % 0.1 % up to 100 %APPEARANCEclear colorless liquidDENSITY[20°C]1.005 g/cm^3VISCOSITY [cP] [20°C]2.31 cPpH3.5	ROKAnol LP3135	3.00 %
Citric acid (50%) Water0.1 % up to 100 %APPEARANCEclear colorless liquidDENSITY[20°C]1.005 g/cm^3VISCOSITY [cP] [20°C]2.31 cPpH3.5	Hydrotrope	3.00 %
Waterup to 100 %APPEARANCEclear colorless liquidDENSITY[20°C]1.005 g/cm^3VISCOSITY [cP] [20°C]2.31 cPpH3.5	Citric acid (50%)	0.1 %
APPEARANCEclear colorless liquidDENSITY[20°C]1.005 g/cm^3VISCOSITY [cP] [20°C]2.31 cPpH3.5	Water	up to 100 %
APPEARANCEclear colorless liquidDENSITY[20°C]1.005 g/cm^3VISCOSITY [cP] [20°C]2.31 cPpH3.5		
DENSITY[20°C] 1.005 g/cm^3 VISCOSITY [cP] [20°C] 2.31 cP pH 3.5	APPEARANCE	clear colorless liquid
VISCOSITY [cP] [20°C] 2.31 cP pH 3.5	DENSITY[20°C]	1.005 g/cm^3
рН 3.5	VISCOSITY [cP] [20°C]	2.31 cP
	рН	3.5

Preparation method (the process is carried out at room temperature)

Procedure:

- 1. Mix ROKAnol L7 with water until it dissolves.
- 2. Then add ROKAnol LP3135 and mix until a homogeneous solution is obtained.
- 3. Then add a hydrotrope and mix; the solution should become clear.
- 4. Finally, add citric acid to the solution.





geneous solution is obtained. Iould become clear.

Preparation for cockpit cleaning

PRODUCT	PERCENTAGE SHARE
ROKAnol GA7	3.00 %
Dipropylene glycol	3.00 %
ROKAmin K15K	2.00 %
Citric acid	1.00 %
Water	up to 100 %

APPEARANCE	ciear coloriess líquia
DENSITY[20°C]	1.007 g/cm^3
VISCOSITY [cP] [20°C]	1.59 cP
рН	2.6

Preparation method (the process is carried out at room temperature)

Procedure:

- 1. First, mix dipropylene glycol with water.
- 2. Then add ROKAnol GA7 and ROKAmin K15K (in this sequence), while continuously mixing until a homogeneous solution is obtained.
- 3. Finally, add citric acid to determine the pH.



Preparation for washing rims (bloody rim)

A)	ı 🕹 —
	PRODUCT	PERC
	Sodium mercaptoacetate (46%)	30.00
	ROKAmid KAD/2A	2.00 9
	ROKAnol NL9	4.00 9
	ROKAnol IT9	5.00 9
	SULFOROKAnol L270/1	5.00
	Water	up to

APPEARANCE	clear colorle
DENSITY[20°C]	1.088 g/cm/
VISCOSITY [cP] [20°C]	73.8 cP
рН	7.3

Preparation method (the process is carried out at room temperature)

Procedure:

- 1. Mix SULFOROKAnol L270/1 with water until it dissolves (the process takes long, so you can accelerate it by heating up the solution).
- 2. Then add sodium mercaptoacetate to the solution and mix it.
- 3. Next, add non-ionic surfactants ROKAnol IT9 ROKAnol NL9, and mix until a homogeneous solution is obtained.
- 4. Finally, add ROKAmid KAD/2A and mix until you obtain a homogeneous solution with increased viscosity.





ENTAGE SHARE

%

%

%

%

%

100 %

ess liquid

∧3

Preparation for rim cleaning - low pH

<u> </u>	
PRODUCT	PERCENTAGE SHARE
EXOclean AC	50.00%
Water	up to 100 %
APPEARANCE	clear colorless liquid
DENSITY[20°C]	1.061 g/cm^3
VISCOSITY [cP] [20°C]	19.0 cP
рН	1.4

Preparation method (the process is carried out at room temperature)

Procedure:

- 1. Add EXOclean AC to water (not vice versa).
- 2. Mix the combined ingredients for 30 min. until homogenization.



Windscreen washer fluid

2	§		
	PRODUCT	PERCENTAGE SHARE	
	Ethyl alcohol	30.00 %	
	Propylene glycol	0.5 %	
	ROKAnol GA7	1.00 %	
	Ammonia	up to pH=7	
	Preservative	0.1 %	
	Water	up to 100 %	
	APPEARANCE	clear colorless liquid	
	DENSITY[20°C]	0.952 g/cm^3	
	VISCOSITY [cP] [20°C]	2.6 cP	
	На	6.1	

Preparation method (the process is carried out at room temperature)

Procedure:

- 1. Mix ethyl alcohol with propylene glycol, then add 30% of the required amount of water and mix.
- 2. Then add ROKAnol GA7 to the solution and mix it.
- 3. Add the remaining amount of water and, mix continuously, add ammonia until pH = 7.
- 4. Final add the preservative to the solution and mix.





Leather upholstery cleaner

<u>ک</u>	
PRODUCT	PERCENTAGE SHARE
Silicone oil	17.00 %
EXOemul OM4	14.00 %
ROKAnol GA7W	5.00 %
Methoxydipropanol	2.00 %
Propylene glycol	2.00 %
Water	up to 100 %
APPEARANCE	white, milky liquid
DENSITY[20°C]	0.994 g/cm^3
VISCOSITY [cP] [20°C]	12669 cP
На	7.1

Preparation method (the process is carried out at room temperature)

Procedure:

- 1. Add a motor oil and EXOemul OM4 to a prepared receptacle. Heat the solution up to 40°C.
- 2. In a separate receptacle, prepare an aqueous solution of ROKAnol GA7W. Add the prepared solution in small portions to the mixture in point 1 and homogenize.
- 3. Then cool down the emulsion while still homogenizing.
- 4. Add propylene glycol and methoxydipropanol to the homogeneous emulsion. Homogenize for 1 hour at room temperature.





www.products.pcc.eu

