



# Foam Control Agents

ROKAmer® and Rokolub® series

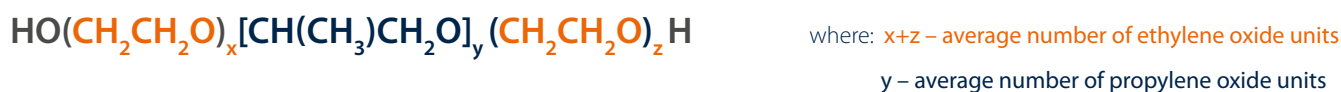
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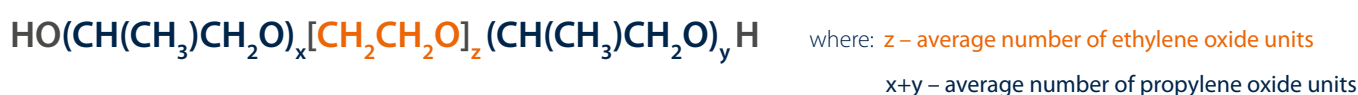
## Chemical description

The ROKAmers® and ROKAmers® R are antifoaming non-ionic surfactants, structurally block copolymers of ethylene and propylene oxide.

ROKAmers® can be represented by the following formula:



ROKAmers® R are based on the same raw materials as ROKAmers®, but in reversed order. This pattern can be observed in product chemical structure:



Rokolub® P-B series have similar structure with ROKAmer® series, but with exception of not being ethoxylated. Chemical structure is represented by following formula:



Rokolub® and Rokolub® PO-D series share the same chemical structure. Just like in case of Rokolub® P-B series, these products are only propoxylated. This pattern is visible in chemical structure of the product:



## Products

**ROKAmer® 2950** – It is dedicated for professional detergents for institutional and industrial cleaning, as well as for some industrial processes. The product is a liquid or a light yellow paste. Its solidification point is below 15°C, and the active substance content is about 100%.

**ROKAmer® 2600** – It is among those products with anti-foaming properties and is mainly dedicated to industrial processes.

**ROKAmer® 2330** – It is dedicated to professional detergents for institutional and industrial cleaning, as well as for some industrial processes. The product is a viscous liquid, light yellow to yellow. The solidification point of the product is below 10°C and the active substance content is about 100%.

**ROKAmer® ED57** – It is a non-ionic surfactant that belongs to the group of block copolymers of ethylene oxide and propylene oxide, based on alkoxylated ethylenediamine. The commercial product is

a liquid with good water solubility. It has a low solidification point of -8°C. The product has a high concentration of the active substance (approx. 100%).

**ROKAmer® R2150** – This product has the form of a clear, colorless liquid with a low coagulation temperature, i.e. below -20°C. It is a highly concentrated product with an active substance content of about 100%.

**ROKAmer® R2650** – The product is a colorless liquid with a freezing point of about 20°C. It is a highly concentrated product with an active substance content of about 100%.

**ROKAmer® R2800** – The product is a clear, colorless liquid with a freezing point below -20°C. The active substance content in the commercial product is approximately 100%. ROKAmer® R2800 is used as a component of professional dishwasher detergents, preparations for industrial bottle washing or preparations for degreasing metals.

**ROKAmer® 1000** – This product is a polymer with a specific, double-action structure, which means that it has two hydrophilic groups. ROKAmer 1000 is one of the products with anti-foaming properties. It is dedicated to professional detergents for industrial and institutional cleaning, as well as for some industrial processes.

**ROKAmer® 2000** – It is a clear, colorless liquid with a low freezing point (below -20°C) and with an active substance content of about 100%. The product has moderate hydrophobicity and good degreasing and wetting properties of hard surfaces. This makes it used, among others, as a component of professional dishwashing chemicals, industrial bottle washing and preparations for degreasing metals.

**Rokolub® 32** – It is a polyol with an average molar mass of about 450 g/mol. The product is a polymer with a double-action structure, which is caused by the presence of two hydrophilic groups in the molecule. Rokolub® 32 can therefore be classified as a product with anti-foaming properties, dedicated mainly to industrial processes.

**Rokolub® 68** – The product is a polymer with a dual-function structure, which is due to the presence of two hydrophilic groups per molecule. Rokolub® 68 can be thus classified as an anti-foaming product mainly dedicated to industrial processes. It contains approx. 100% of the active substance. At room temperature, it is a clear and viscous liquid with a low freezing point (below -20°C).

**Rokolub® 150** – Product is a polymer with a double-action structure, which is caused by the presence of two hydrophilic groups in the molecule. Rokolub® 150 can therefore be classified as a product with anti-foaming properties, dedicated mainly to industrial processes such as industrial cleaning, pulp and paper and lubricants.

**Rokolub® PO-D-460** – It is a polyol with an average molar mass of about 4000 g/mol. The product consist of two hydrophilic groups in the molecule. Rokolub® PO-D-460 can therefore be classified as a product with anti-foaming properties, dedicated mainly to industrial processes.

**Rokolub® P-B-46** – This product is in the form of a clear, colorless liquid with a low freezing point below -20°C and active substance content approximately 100%. Rokolub® P-B-46 is a hydrophobic product, it does not dissolve in water. It is classified as a product with anti-foaming properties. It is dedicated to professional detergents, used for institutional and industrial cleaning, as well as for some industrial processes, such as industrial bottle washing processes or preparations for metals degreasing.

**ROKAmer® G1000** – It is a non-ionic surfactant, from the group of ethylene oxide and propylene oxide block copolymers utilizing glycerin as a starter. The product has the form of a clear, colorless liquid with a low coagulation temperature, i.e. below -20°C and an active substance content of approx. 100%.

**ROKAmer® G3400** – The product is a clear, colorless liquid with a low freezing point, i.e. below -20°C, and the active substance content of about 100%.

**ROKAmer® G3500** – This product is a clear, colorless liquid with a low freezing point, i.e. below -15°C, and the active substance content of about 100%.

**ROKAmer® G3800** – The product is a colorless and clear liquid. It features a low freezing point, i.e. below -20°C. ROKAmer® G3800 is a product with a very high concentration of the active substance, amounting to approx. 100%.

**ROKAmer® G4300** – It has excellent anti-foaming properties. At 25°C, the product is a clear, colorless liquid with a color of max. 50 on the Hazen scale. ROKAmer® G4300 dissolves well in cold water. Its solidification point is below -20°C. The product contains approx. 100% of the active substance.

Anti-foaming agents have several properties responsible for their efficient operation, such as:

- low viscosity,
- effectively eliminating foam and preventing of foam formation,
- high proliferation in the foamed surface,
- lack of silicone components,
- long shelf life.



## Products for lubricant industry

Defoamers dedicated to neat oils and soluble oils type of MWF formulation. Especially recommended to be used alongside with

group V base oils or rapeseed oil. In table below the results of solubility in various PAGs and RO can be found.

Product	Water soluble PAG	Water insoluble PAG	Mineral oil soluble PAG	Rapeseed oil
ROKAmer® R2150	+	+	▲	▲
ROKAmer® R2650	+	+	+	▲
Rokolub® 32	+	+	+	●
Rokolub® 68	+	+	+	+
Rokolub® 150	+	+	+	●
Rokolub® PO-D-460	+	+	+	▲
Rokolub® P-B-46	+	+	+	+

- + soluble
- partially soluble
- ▲ insoluble





## Physicochemical data

As can be seen all of the products are liquid substances with MW from 450 up to 4000 g per mole. In addition due to the low viscosity (max 850 cP for Rokolub® PO-D-460) these products can be easily applied in the formulations. High flash point is another advantage

of ROKAmer® and Rokolub® series. In terms of storage our products have relatively low solidification point, this allows to keep them even in lower temperatures.

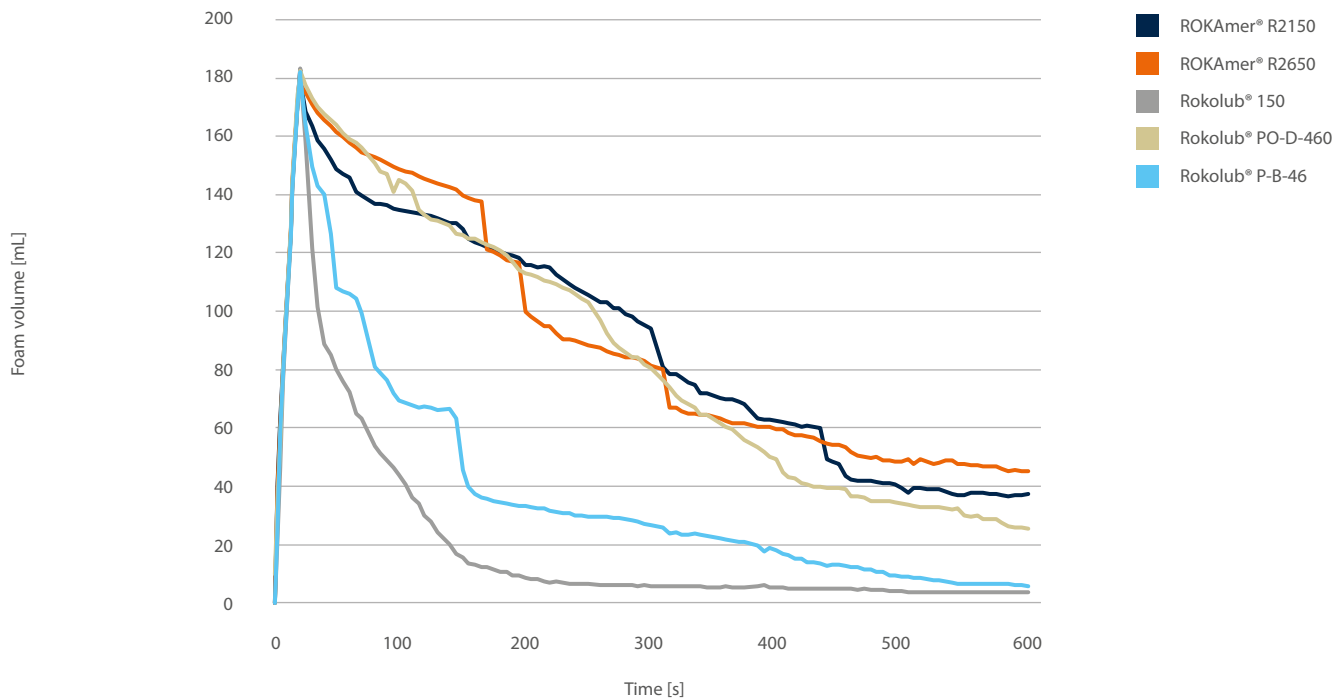
Parameter	ROKAmer® R2150	ROKAmer® R2650	Rokolub® 32	Rokolub® 68	Rokolub® 150	Rokolub® PO-D-460	Rokolub® P-B-46
Appearance at 25°C	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid
CAS number	9003-11-6	9003-11-6	25322-69-4	25322-69-4	25322-69-4	25322-69-4	9003-13-8
Hazen color	Max 100 (20°C)	Max 100 (20°C)	Max 50 (20°C)	Max 50 (20°C)	Max 50 (20°C)	Max 100 (20°C)	Max 30 (20°C)
Average molar mass [g/mole]	2200	2700	450	1000	2000	4000	1000
Water content [% by weight]	Max 0.4	Max 0.5	Max 0.2	Max 0.5	Max 0.5	Max 0.5	Max 0.5
Solidification point [°C]	<(-20)	2	<(-20)	<(-20)	<(-20)	<(-20)	<(-20)
Density at 25°C [g/mL]	1.03	1.05	1.01	1.02	1.04	1.02	0.99
Viscosity at 25°C [cP]	400	500	70	150	330	850	90
Flash point [°C]	–	>100	>220	>200	>200	>200	>210



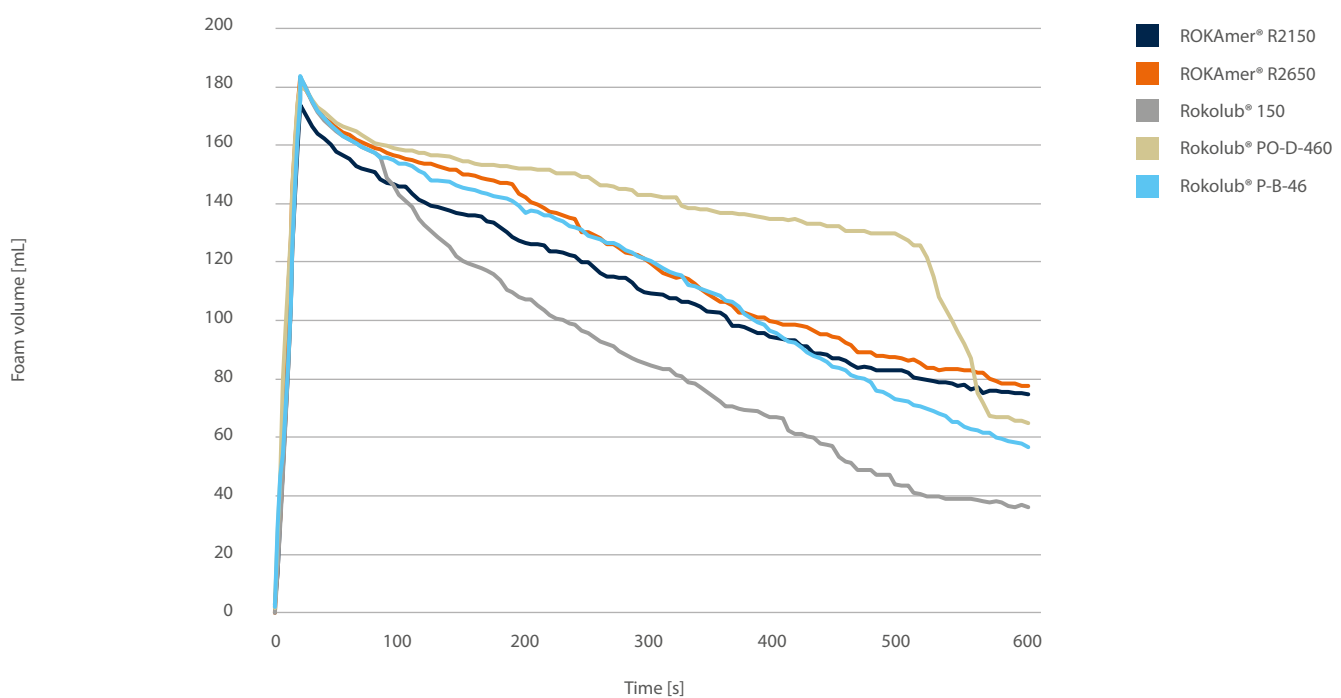
## Antifoaming properties

Antifoaming ability of ROKAmers® is determined by conducting series of test using KRUSS DFA 100 equipment. The solution of SLS is being aerated until the foam reaches 180 ml, after that 2 ml of given ROKAmer® solution is injected on the top of the foam using

automatic pipette. The difference in foam volume is measured for 10 minutes. As can be seen ROKAmers® present very good performance in demineralized and hard water solutions, especially Rokolub®150 and Rokolub® P-B-46 are the most outstanding among the series.



**Figure 1.** Chart presenting antifoaming properties of ROKAmers® and Rokolubs® for lubricants in demineralized water



**Figure 2.** Chart presenting antifoaming properties of ROKAmers® and Rokolubs® for lubricants in hard water

## Foaming properties

In lubricants application foaming might be the most important issue during preparation of the formulation, that's why for this industry we recommend products with low foaming profile. Foaming test is

conducted by measuring the foam volume after aerating 190 ml of thermostated ROKAmer® or Rokolub® sample. Results are shown in table below.

Product	Foam volume at t=0 min [mL]	Foam volume at t=10 min [mL]	Difference [mL]
ROKAmer® R2150	380	60	320
ROKAmer® R2650	400	20	380
Rokolub® 32	0	0	0
Rokolub® 68	0	0	0
Rokolub® 150	0	0	0
Rokolub® PO-D-460	0	0	0
Rokolub® P-B-46	10	0	10



## Products for industrial cleaning

Products dedicated for all kind of cleaning including metal cleaning, fruits and vegetables cleaning, autocare etc. In table below solubility in basic solvents can be found.

Product	Demineralized water	Methanol	Ethyl ether	Acetone
ROKAmer® 2950	+	+	▲	+
ROKAmer® 2600	—	+	+	+
ROKAmer® 2330	+	+	●	+
ROKAmer® ED57	+	+	●	+
ROKAmer® R2150	+	+	▲	▲
ROKAmer® R2650	+	+	▲	+
ROKAmer® R2800	—	+	+	+
ROKAmer® 1000	—	+	+	+
ROKAmer® 2000	—	+	+	+
Rokolub® 68	—	+	+	+
Rokolub® P-B-46	▲	+	+	+
ROKAmer® G1000	—	+	+	+
ROKAmer® G3400	—	+	▲	+
ROKAmer® G3500	+	+	+	+
ROKAmer® G3800	—	+	+	+
ROKAmer® G4300	●	+	+	+

+ soluble

— soluble in cold water

● partially soluble

▲ insoluble



## Physicochemical data

Products for industrial purposes are all light color liquids with relatively low viscosity (max 1300 cp). Additionally low cloud point, moderate surface tension and mild pH make them easy to apply and

use products for various applications. Molar masses range from 1000 up to 4300 g per mole. Storage is unproblematic due to the low solidification points of our products.

Parameter	ROKAmer® 2950	ROKAmer® 2600	ROKAmer® 2330	ROKAmer® ED57	ROKAmer® R2150
Appearance at 25°C	Liquid	Liquid	Liquid	Liquid	Liquid
CAS number	9003-11-6	9003-11-6	9003-11-6	26316-40-5	9003-11-6
Hazen color	30 (40°C)	Max 50 (40°C)	Max 125 (40°C)	–	Max 100 (20°C)
Average molar mass [g/mole]	2900	2600	2200	–	2200
Water content [% by weight]	Max 1	Max 1	Max 1	Max 0.4	Max 0.4
Solidification point [°C]	<15	<(-20)	<10	<(-8)	<(-20)
Density at 25°C	1.04	1.02	1.03	1.04	1.03
Viscosity at 25°C	1200	700	–	1300	400
Cloud point*	54-60 (solution A)	16-20 (solution A)	21-26 (solution A)	65-69 (solution D)	33-38 (solution A)
pH in solution** at 20°C	4.6-7.4 (10% in solution A)	4.6-7.4 (1% in solution A)	4.6-7.4 (10% in solution A)	9-11 (2.5% in solution A)	6-8 (2.5% in solution A)
Surface tension [mN/m]	40.6	35.6	37.3	34.7	43.8

\*Cloud point according to PN-EN 1890:2000:

Solution A – aqueous solution

Solution D – 45 g butyldiglycol/water solution

Solution E – 25 g butyldiglycol/water solution

\*\*pH in solution according to PN-EN 1262:2004:

Solution A – aqueous solution

Solution B – 1:1 water and ethanol solution

Foam Control Agents. ROKAmer® and Rokolub® series

Parameter	ROKAmer® R2650	ROKAmer® R2800	ROKAmer® 1000	ROKAmer® 2000	Rokolub® 68	Rokolub® P-B-46
Appearance at 25°C	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid
CAS number	9003-11-6	9003-11-6	9003-11-6	9003-11-6	25322-69-4	9003-13-8
Hazen color	Max 100 (20°C)	Max 20 (40°C)	Max 20 (25°C)	Max 50 (40°C)	Max 50 (20°C)	Max 30 (20°C)
Average molar mass [g/mole]	2700	2800	1000	1800	1000	1000
Water content [% , by weight]	Max 0.5	Max 0.5	Max 1	Max 1	Max 0.5	Max 0.5
Solidification point [°C]	2	<(-20)	<(-20)	<(-20)	<(-20)	<(-20)
Density at 25°C	1.05	1.01	1.02	1.01	1.02	0.99
Viscosity at 25°C	500	550	170	400	150	90
Cloud point*	49-53 (solution E)	28-31 (solution D)	39-43 (solution E)	23-27 (solution A)	30-35 (solution A)	18-20 (solution D)
pH in solution** at 20°C	6-8 (2.5% in solution A)	4-7 (1% in solution B)	5-7 (1% in solution A)	4.6-7.4 (1% in solution A)	5-7 (1% in solution A)	6-8 (1% in solution B)
Surface tension [mN/m]	46.4	39.8	44.8	38.9	43.9	38.1

\*Cloud point according to PN-EN 1890:2000:

Solution A – aqueous solution

Solution D – 45 g butyldiglycol/water solution

Solution E – 25 g butyldiglycol/water solution

\*\*pH in solution according to PN-EN 1262:2004:

Solution A – aqueous solution

Solution B – 1:1 water and ethanol solution



Parameter	ROKAmer® 3800	ROKAmer® G1000	ROKAmer® G3400	ROKAmer® G3500	ROKAmer® G3800	ROKAmer® G4300
Appearance at 25°C	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid
CAS number	9003-11-6	9082-00-2	9082-00-2	9082-00-2	9082-00-2	9082-00-2
Hazen color	Max 100 (40°C)	Max 50 (20°C)	Max 3 (25°C)	Max 20 (25°C)	Max 20 (40°C)	Max 50 (25°C)
Average molar mass [g/mole]	4000	1000	3400	3500	3800	4300
Water content [%; by weight]	Max 0.5	Max 0.5	Max 0.2	Max 0.5	Max 0.5	Max 0.3
Solidification point [°C]	<(-20)	<(-20)	<(-20)	<(-15)	<(-20)	<(-20)
Density at 25°C	1.02	1.02	1.02	1.04	1.02	1.02
Viscosity at 25°C	950	230	600	870	870	900
Cloud point*	16-20 (solution A)	40-45 (solution A)	30-32 (solution D)	36-42 (solution A)	25-28 (solution D)	33-37 (solution D)
pH in solution** at 20°C	5-8 (5% in solution B)	5-7 (1% in solution B)	5-7 (10% in solution A)	5-7 (1% in solution A)	5-7 (1% in solution B)	5-7 (1% in solution B)
Surface tension [mN/m]	33.06	47.2	–	42.0	37.3	35.9

\*Cloud point according to PN-EN 1890:2000:

Solution A – aqueous solution

Solution D – 45 g butyldiglycol/water solution

Solution E – 25 g butyldiglycol/water solution

\*\*pH in solution according to PN-EN 1262:2004:

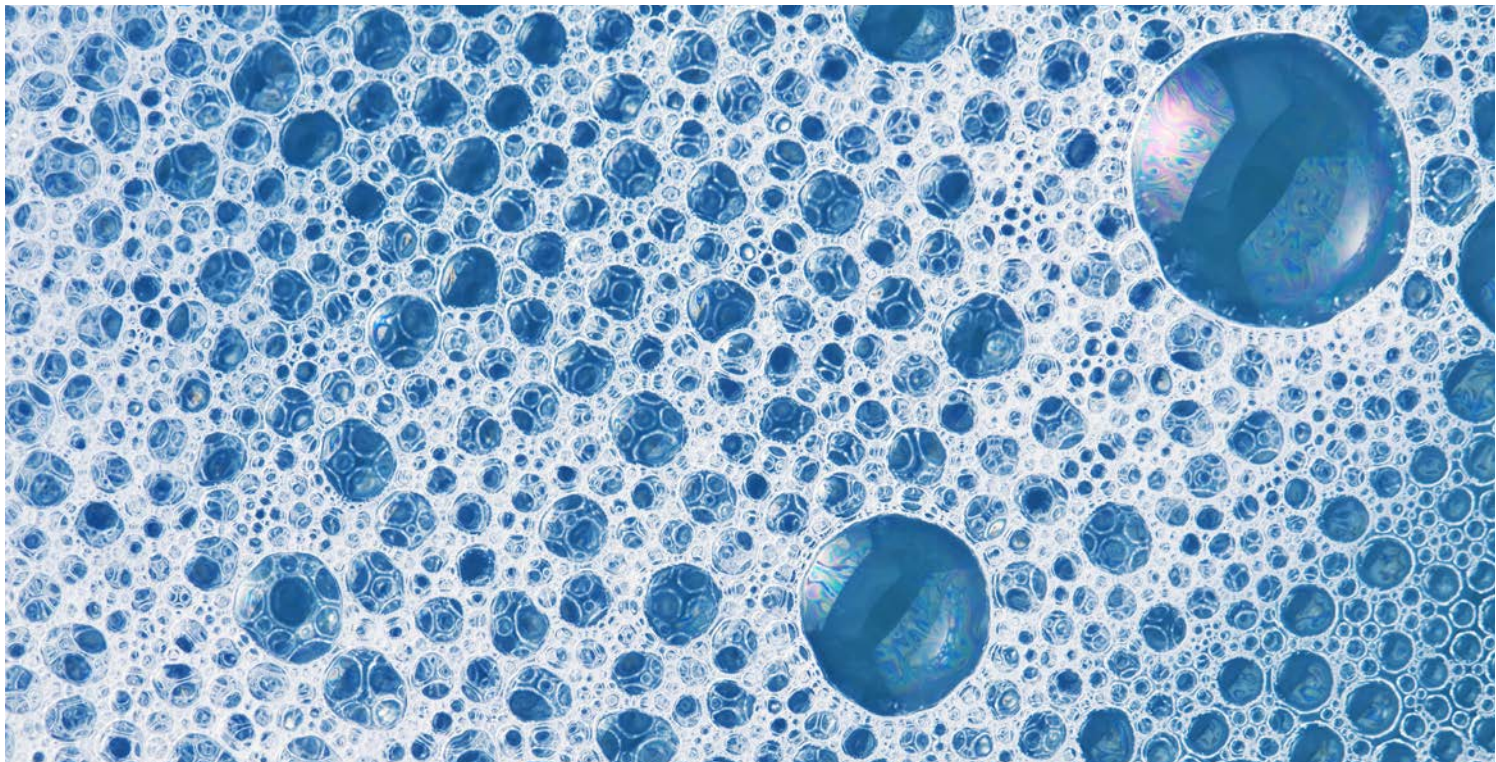
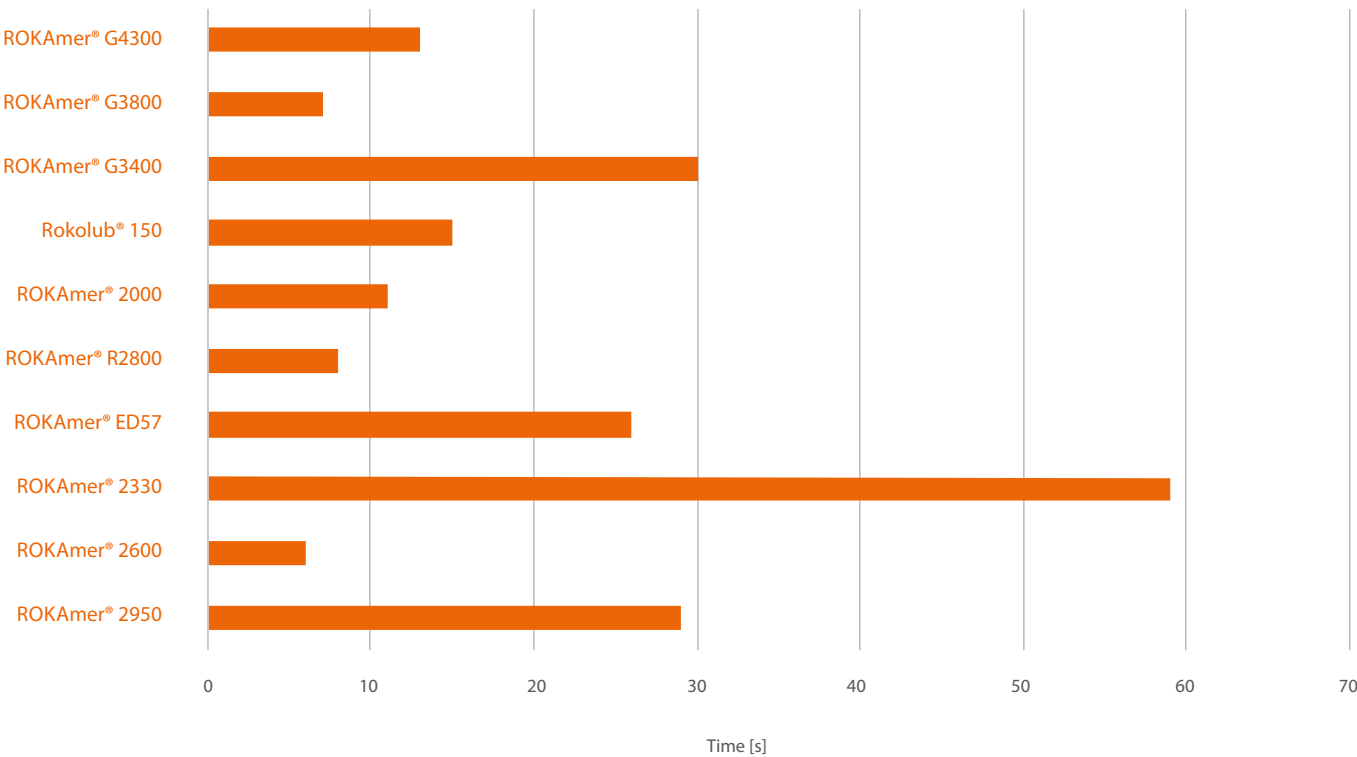
Solution A – aqueous solution

Solution B – 1:1 water and ethanol solution

## Wetting properties

In many applications the effective wetting capability is a crucial property of surfactants. The wetting capability of cotton fabric was determined according to EN 1772:2001 method. Wetting

time was measured for products solution in demineralized water (concentration: 10 g/L) at temperature of 20°C. Three ROKAmers® show the best properties – ROKAmer® G3800, R2800 and 2600.

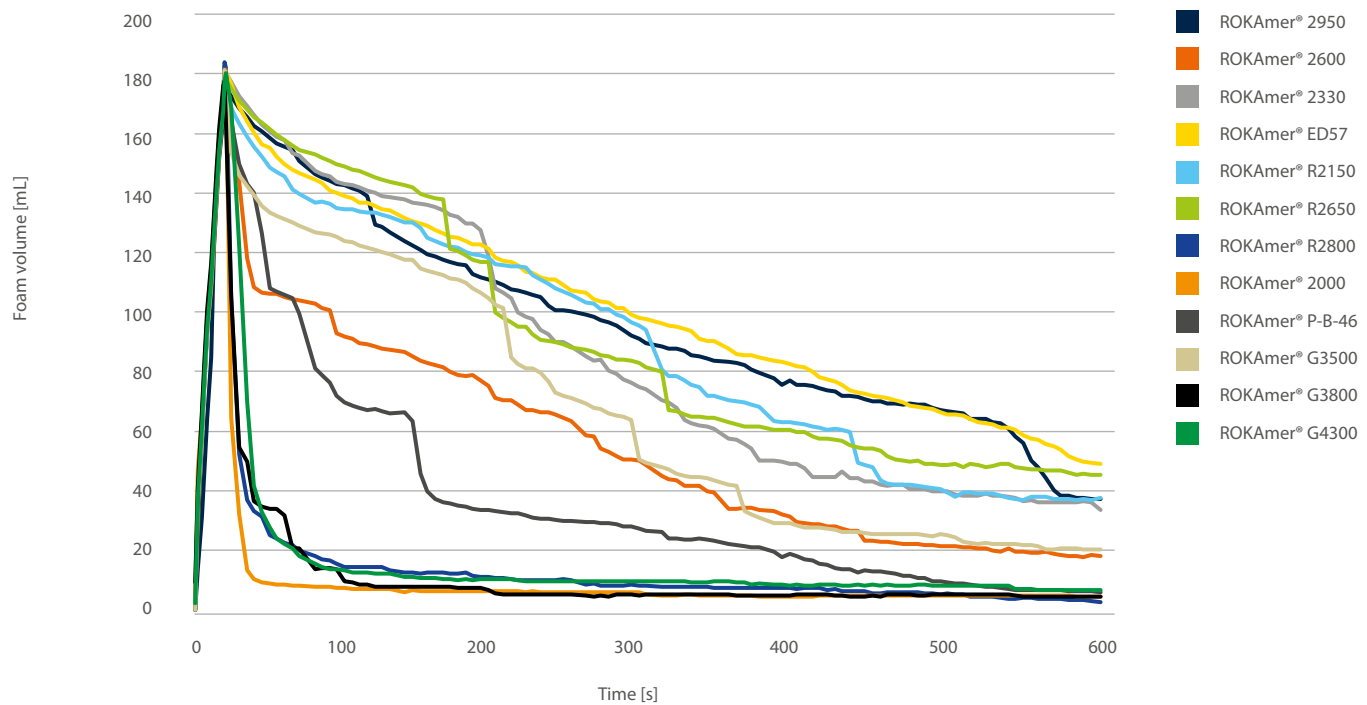




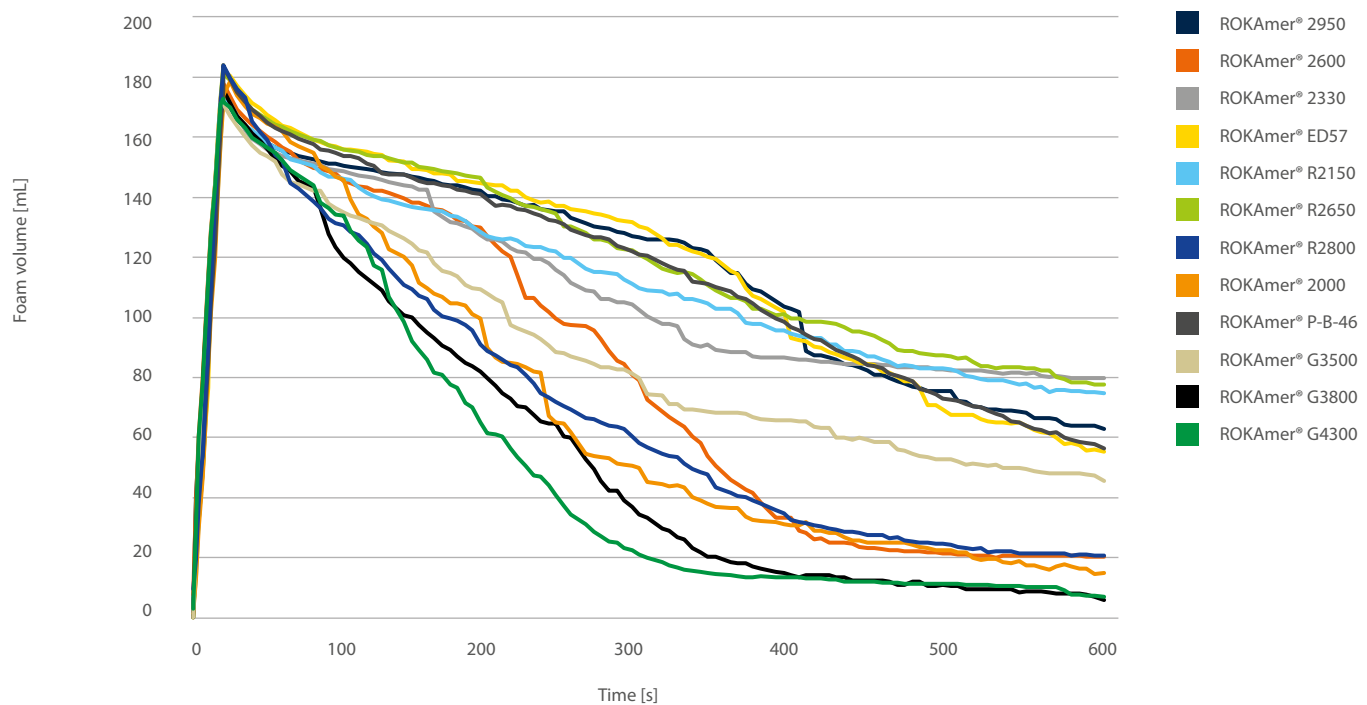
## Antifoaming properties

As in the previous part the antifoaming ability of products is determined by conducting series of test using KRUSS DFA 100 equipment and using the same method. As can be seen products

present very good performance in demineralized and hard water solutions, especially ROKAmer® 2000, R2800, G4300, G3800 and Rokolub® P-B-46 are the most outstanding among the series.



**Figure 3.** Chart representing antifoaming properties of ROKAmers® and Rokolubs® for industrial use in demineralized water



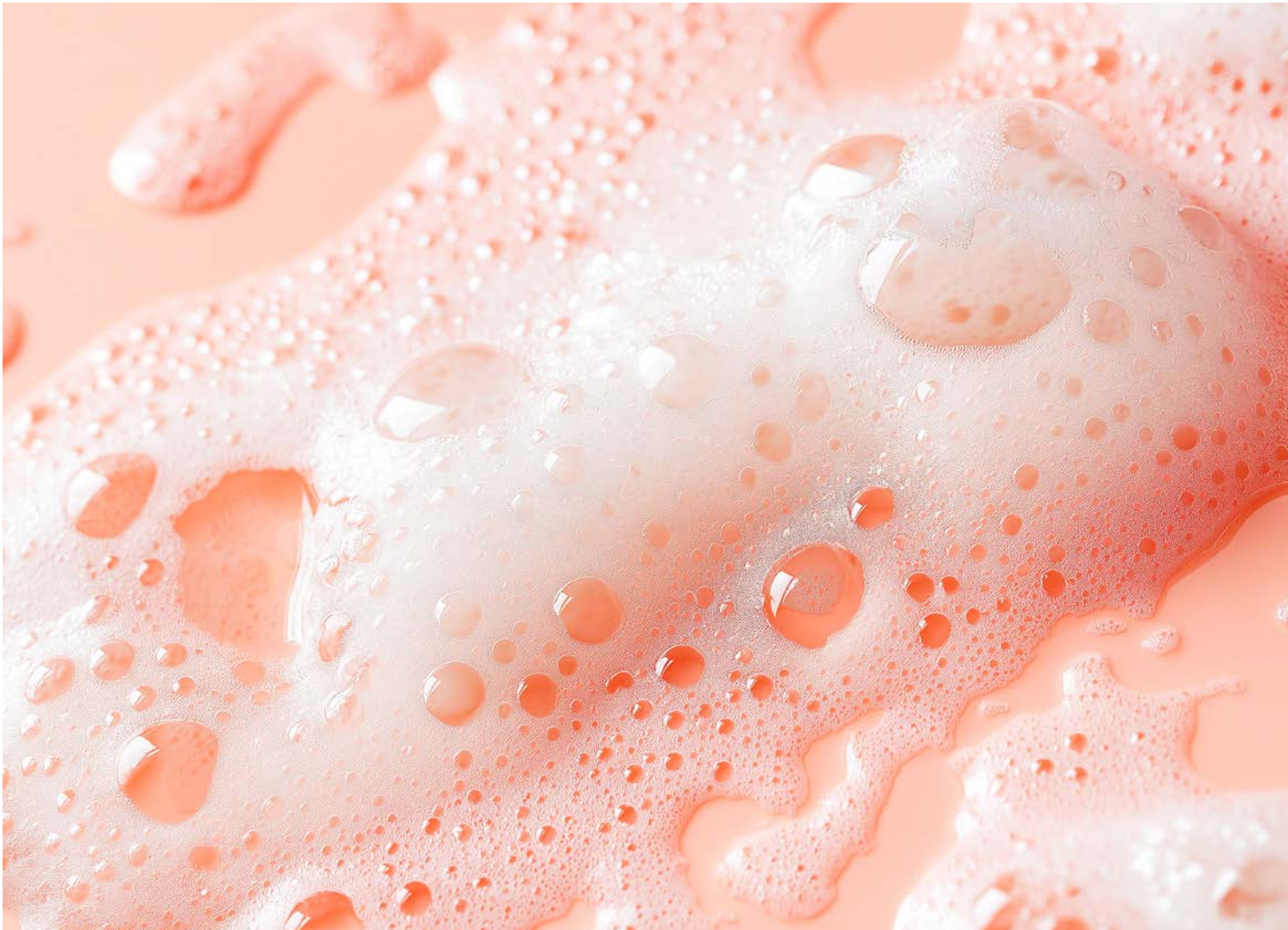
**Figure 4.** Chart representing antifoaming properties of ROKAmers® and Rokolubs® for industrial use in hard water

## Products for metal surface preparation

Products dedicated to metal surface preparation including cleaning and degreasing. Below there is table about solubility in basic solvents.

Product	Demineralized water	Methanol	Ethyl ether	Acetone
ROKAmer® R2800	—	+	+	+
ROKAmer® 2000	—	+	+	+
Rokolub® P-B-46	▲	+	+	+
ROKAmer® G3800	—	+	+	+

- + soluble
- soluble in cold water
- ▲ insoluble





## Physicochemical data

Products for metal cleaning purposes are all light color liquids with low viscosity. Additionally low cloud point, moderate surface tension and mild pH make them easy to apply and use products for

various applications. Molar masses range from 1000 up to 3800 g per mole. Very low solidification point make the easy to store in harsh conditions.

Parameter	ROKAmer® R2800	ROKAmer® 2000	Rokolub® P-B-46	ROKAmer® G3800
Appearance at 25°C	Liquid	Liquid	Liquid	Liquid
CAS number	9003-11-6	9003-11-6	9003-13-8	9082-00-2
Hazen color at 40°C	Max 20 (40°C)	Max 50 (40°C)	Max 30 (20°C)	Max 20 (40°C)
Average molar mass [g/mole]	2800	1800	1000	3800
Water content [% by weight]	Max 0.5	Max 1	Max 0.5	Max 0.5
Solidification point [°C]	<(-20)	<(-20)	<(-20)	<(-20)
Density at 25°C	1.01	1.01	0.99	1.02
Viscosity at 25°C	550	400	90	870
Cloud point*	28-31 (solution D)	23-27 (solution A)	18-20 (solution D)	25-28 (solution D)
pH in solution** at 20°C	4-7 (1% in solution B)	4.6-7.4 (1% in solution A)	6-8 (1% in solution B)	5-7 (1% in solution B)

\*Cloud point according to PN-EN 1890:2000:

Solution A – aqueous solution

Solution D – 45 g butyldiglycol/water solution

\*\*pH in solution according to PN-EN 1262:2004:

Solution A – aqueous solution

Solution B – 1:1 water and ethanol solution

## Stability in base and acids

During surface preparation and metal cleaning application often strong acids and bases are used, this fact dictates the use of products that are stable in harsh conditions. As can be seen

products are especially stable in strong acids such as sulfuric acid or hydrochloride acid.

- macroscopic phase separation
- ▲ homogenous, cloudy solution
- homogenous, clear solution
- + homogenous, opalescent solution

Product name	Stability in 30% NaOH in given concentration g/L																
	10	20	30	40	70	80	110	120	180	200	240	250	260	270	280	320	360
ROKAmer® R2800	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
ROKAmer® 2000	■	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Rokolub® P-B-46	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
ROKAmer® G3800	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

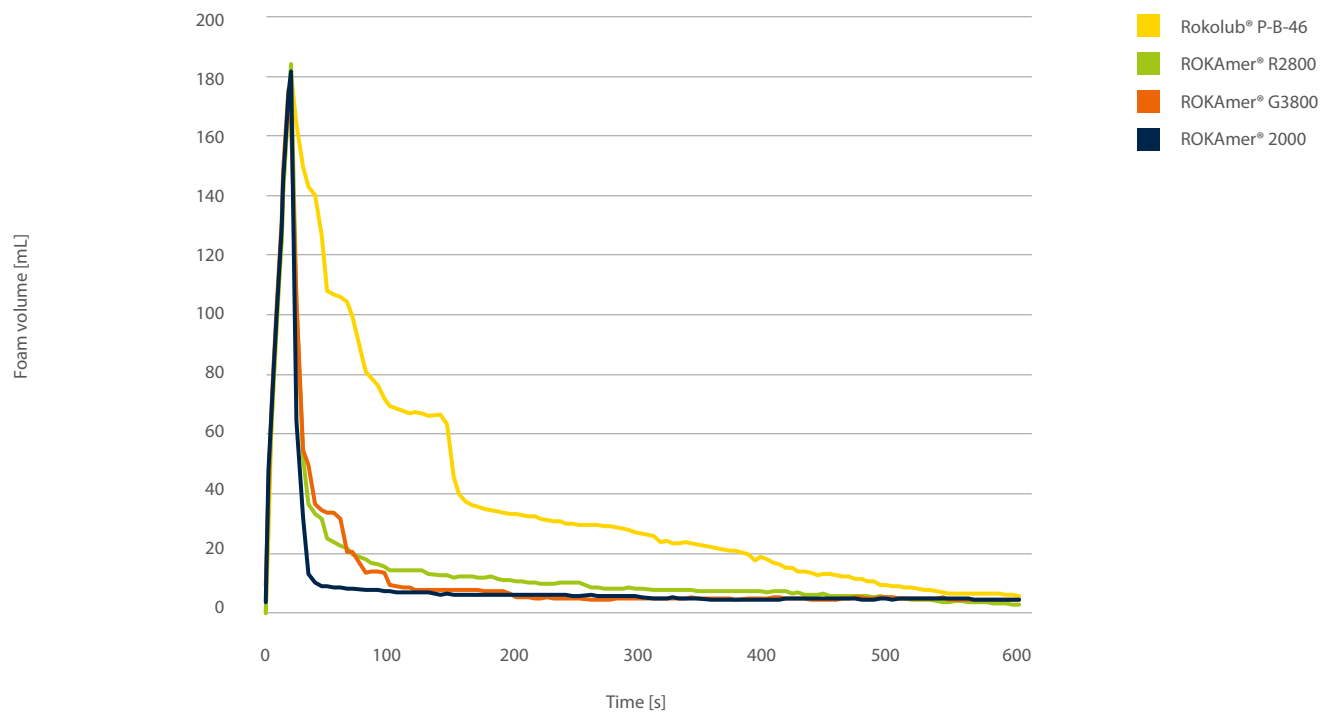
Product name	Stability in 25% HCl in given concentration mL/L								
	1	2	3	10	12	15	105	140	25% HCl solution
ROKAmer® R2800	■	■	■	■	■	■	■	■	■
ROKAmer® 2000	■	■	■	■	■	■	■	■	■
Rokolub® P-B-46	●	●	●	●	●	●	■	■	■
ROKAmer® G3800	●	●	●	●	●	●	■	■	■

Product name	Stability in 25% H <sub>2</sub> SO <sub>4</sub> in given concentration mL/L											
	1	2	3	4	20	25	35	40	45	110	140	25% H <sub>2</sub> SO <sub>4</sub> solution
ROKAmer® R2800	■	■	■	■	■	■	■	■	■	■	■	■
ROKAmer® 2000	■	+	+	+	+	+	+	+	+	+	+	■
Rokolub® P-B-46	●	●	●	●	●	●	●	●	●	●	●	●
ROKAmer® G3800	▲	+	+	+	+	+	+	+	+	■	■	■

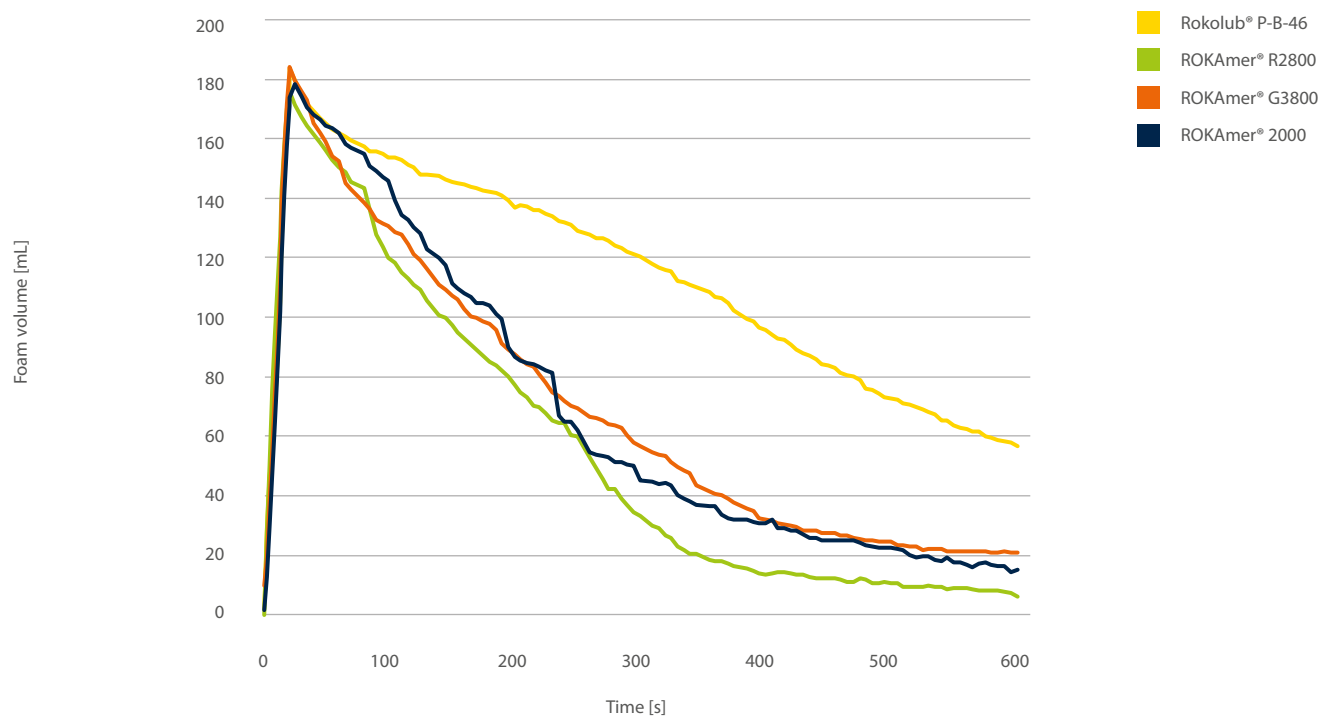
## Antifoaming properties

As in the previous part the antifoaming ability of products is determined by conducting series of test using KRUSS DFA 100 equipment and using the same method. All products suggested

for metal cleaning purposes show excellent antifoaming performance both in demineralized and hard water.



**Figure 5.** Chart representing antifoaming properties of ROKAmers® and Rokolubs® for Metal Cleaning in demineralized water






















































































**Figure 6.** Chart representing antifoaming properties of ROKAmers® and Rokolubs® for Metal Cleaning in hard water



## Product qualifications

Products are approved product FDA and BfR qualifications. Additionally our products are check for biodegradability, pathogenic microorganisms causing transmissible spongiform encephalopathy

(TSE) and bovine spongiform encephalopathy (BSE), and they are not tested on animals.

Product	FDA Qualification	BfR Qualification	Biodegradability	TSE/BSE FREE	Kosher	Halal friendly
ROKAmer® 2950						
ROKAmer® 2600						
ROKAmer® 2330						
ROKAmer® ED57						
ROKAmer® R2150						
ROKAmer® R2650						
ROKAmer® R2800						
ROKAmer® 1000						
ROKAmer® 2000						
Rokolub® 32						
Rokolub® 68						
Rokolub® 150						
Rokolub® PO-D-460						
Rokolub® P-B-46						
ROKAmer® G1000						
ROKAmer® G3400						
ROKAmer® G3500						
ROKAmer® G3800						
ROKAmer® G4300						





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September 2025

The information in the catalogue is believed to be accurate and compiled to the best of our knowledge; however, it should be considered as introductory only. Detailed information about our products is available in TDS and MSDS.

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

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