

Polyols for one component foams and adhesives & sealants



September 2019

One Component Foams (OCF)

PCC Rokita offers a broad portfolio of special products dedicated for the OCF industry. In addition to the Rokopol D and Rokopol G polyol series, which covered the most commonly used polyether polyols, the Rokopol iCan product line has been developed as a dedicated to one-component foams. Rokopol iCan series includes several products that differ significantly from each other in selected properties.

Rokopol

PRODUCT NAME	HYDROXYL NUMBER [mg KOH/g]	VISCOSITY AT 25°C [mPas]	CAS NUMBER	DESCRIPTION
Rokopol® D450	230 – 270	60 – 80	25322-69-4	Low viscosity diol of molecular weight ca. 450 g/mol with higher hydroxyl value designed as an additive for the production of specialized OCF foams.
Rokopol® D1002	108 – 116	130 – 170	25322-69-4	Polyoxypropylene glycol of molecular weight ca. 1000 g/mol often used as an additive in OCF systems. It is intended to improve cellular structure and skin texture. It also reduces friability of the foam.
Rokopol® D2002	53 – 59	280 – 380	25322-69-4	Polyoxypropylene glycol of molecular weight ca. 2000 g/mol used as an additive in OCF systems with improved elasticity.
Rokopol® G441	330 – 360	250 – 310	9082-00-2	High reactivity glycerine based triol of molecular weight ca. 440 g/mol. Due to its noticeable crosslinking properties it can be used as an ingredient to improve mechanical properties.
Rokopol® G500	290 – 310	240 – 340	25791-96-2	Glycerine based triol of molecular weight ca. 560 g/mol. It can be used as a component to improve mechanical properties.
Rokopol® G700	225 – 250	220 – 270	25791-96-2	Glycerine based triol of molecular weight ca. 700 g/mol often used as an additive to improve dimensional stability.
Rokopol® G1000	155 – 165	200 – 300	25791-96-2	Glycerine based triol of molecular weight ca. 1000 g/mol very often used as a main component in OCF systems. Low sodium and potassium content allows to get long shelf time.



Rokopol iCan brand is a family of polyether polyols designed to improve chosen properties of one component foams. This new product line gives to OCF manufacturers unique possibility to adjust foam parameters to their needs.

Rokopol iCan

PRODUCT NAME	HYDROXYL NUMBER [mg KOH/g]	VISCOSITY AT 25°C [mPas]	CAS NUMBER	DESCRIPTION
Rokopol iCan® 2432	145 – 160	150 – 250	9082-00-2	Special polyether polyol for high-performance OCF foams. Its main advantage is improved foam yield. In addition, the foam will be characterized by noticeably finer and regular cellular structure. Polyol is intended for use as a base polyol.
Rokopol iCan® 2672	150 – 170	50 – 150	9082-00-2	Special polyether polyol for the production of one-component foam with high content of chlorinated paraffin.
Rokopol iCan® 2770	150 – 170	200 – 350	9082-00-2	Special polyether polyol dedicated as an additive for winter OCF foams. It noticeably reduces the tack free- and cutting time. In selected formulations the yield will be increased. Content in polyol blend up to 50 wt%.
Rokopol iCan® 2812	105 – 115	200 – 550	9082-00-2	Special polyether polyol for the production of one-component foam with increased elasticity. Content in polyol blend up to 80 wt%.
Rokopol iCan® 2823	73 – 83	250 – 600	9082-00-2	Special polyether polyol for the production of one-component foam with increased elasticity. Content in polyol blend up to 50 wt%.
Rokopol iCan® 2850	225 – 250	180 – 280	9082-00-2	Special polyether polyol for the production of one-component foam with high content of chlorinated paraffin. It reduces the tack free- and cutting time.
Rokopol iCan® 4100	150 – 165	200 – 350	9082-00-2	Special designed polyether polyol intended for winter OCF foams. Foam based on this polyol is characterized by reduced tack free- and cutting times as well as improved yield. It can be used as a base polyol.

In addition to the polyether products, PCC Rokita offers a series of polyester polyols dedicated to OCF applications. Known under Rokester name those products allow for significant improvements in fire resistance, dimensional stability and cellular structure.

Rokester

PRODUCT NAME	HYDROXYL NUMBER [mg KOH/g]	VISCOSITY AT 25°C [mPas]	CAS NUMBER	DESCRIPTION
Rokester® 1600	150 – 170	1000 – 3000	–	Special aliphatic polyester polyol; helps in reducing PMDI consumption. In some formulations it improves the yield of the foam.
Rokester® 1710	170 – 190	2500 – 4500	–	Special aliphatic polyester polyol with very low reactivity; very high loading level possible.
Rokester® 1711	185 – 195	2500 – 3500	–	Special aliphatic polyester polyol with very low reactivity; very high loading level possible.
Rokester® 2600	250 – 270	2500 – 4500	–	Controlled reactivity aromatic based polyester polyol for OCF.
Rokester® 2610	250 – 270	3500 – 5500	–	Modified aromatic polyester polyol for OCF with low reactivity; high loading level possible.
Rokester® 2700	250 – 270	2500 – 5000	–	Aromatic polyester polyol for OCF.
Rokester® 3110	300 – 330	2000 – 3000	–	Aromatic polyester polyol for summer OCF foams with high hydroxyl number.

Adhesives & Sealants

Wide range of polyols for Adhesives and Sealants is continually being extended to meet specific customer requirements and includes diols and triols with broad range of molecular weight and reactivity. Low content of sodium and potassium guarantees longer shelf time of 1K adhesives and sealants.

Rokopol LDB

PRODUCT NAME	HYDROXYL NUMBER [mg KOH/g]	VISCOSITY AT 25°C [mPas]	CAS NUMBER	DESCRIPTION
Rokopol® LDB 2000D	53 – 59	280 – 400	25322-69-4	Low double bond polyoxpropylene diol of molecular weight ca. 2000 g/mol, designed for prepolymer synthesis.
Rokopol® LDB 4000D	26 – 29	800 – 1200	25322-69-4	Low double bond polyoxpropylene diol of molecular weight ca. 4000 g/mol, designed for prepolymer synthesis.
Rokopol® LDB 6000D	17 – 19	1400 – 2300	25322-69-4	Low double bond polyoxpropylene diol of molecular weight ca. 6000 g/mol, designed for prepolymer synthesis.
Rokopol® LDB 8000D	13 – 15	2600 – 3600	25322-69-4	Low double bond polyoxpropylene diol of molecular weight ca. 8000 g/mol, designed for specialty products: adhesives, hybrid sealants, printing inks etc.
Rokopol® LDB 12000D	9 – 11	4000 – 8000	25322-69-4	Low double bond polyoxpropylene diol of molecular weight ca. 12000 g/mol, designed for specialty products: adhesives, hybrid sealants, printing inks etc.
Rokopol® LDB 18000D	5 – 7	19000 – 27000	25322-69-4	Low double bond polyoxpropylene diol of molecular weight ca. 18000 g/mol, designed for specialty products: adhesives, hybrid sealants, printing inks etc.



PRODUCT NAME	HYDROXYL NUMBER [mg KOH/g]	VISCOSITY AT 25°C [mPas]	CAS NUMBER	DESCRIPTION
Rokopol® D450	230 – 270	60 – 80	25322-69-4	Low molecular weight polyoxypropylene glycol of molecular weight ca. 450 g/mol and functionality f=2, designed as a main raw material for for the production of prepolymers.
Rokopol® D1002	108 – 116	130 – 170	25322-69-4	Average molecular weight polyoxypropylene glycol of molecular weight ca. 1000 g/mol and functionality f=2, designed as a main raw material for the production of prepolymers.
Rokopol® D2002	53 – 59	280 – 380	25322-69-4	Polyoxypropylene glycol of molecular weight ca. 2000 g/mol and functionality f=2, designed as a main raw material for the production of prepolymers and polyurethane elastomers.
Rokopol® DE320	31 – 37	550 – 800	53637-25-5	Reactive polyoxyalkylated polyether polyol of molecular weight ca. 3000 g/mol, designed for the production of prepolymers and other polyurethane plastics. Product characterized by its hydrophilic nature.
Rokopol® DE4020	27 – 31	700 – 900	53637-25-5	High molecular weight reactive polyoxyalkylated polyether polyol of molecular weight ca. 4000 g/mol, It is designed as an intermediate for the production of polyurethane prepolymers.
Rokopol® G441	330 – 360	250 – 310	9082-00-2	Reactive glycerine based polyoxyalkylene triol of molecular weight ca. 440 g/mol, designed as an intermediate for the production of polyurethane elastomers, coatings, adhesives and impregnants and varnishes. Improves mechanical properties.
Rokopol® G500	290 – 310	240 – 340	25791-96-2	Glycerine based polyoxyalkylene triol of molecular weight ca. 560 g/mol, designed as an intermediate for the production of polyurethane elastomers, coatings, adhesives, impregnants and varnishes.
Rokopol® G700	225 – 250	220 – 270	25791-96-2	Glycerine based polyoxyalkylene triol of molecular weight ca. 700 g/mol, designed as an additive for prepolymer synthesis.
Rokopol® G1000	155 – 165	200 – 300	25791-96-2	Glycerine based polyoxyalkylene triol of molecular weight ca. 1000 g/mol, designed as an raw material for the production of polyurethane 2K elastomers, and 1K prepolymers.
Rokopol® F3000	53 – 59	460 – 520	25791-96-2	Glycerine based polyoxyalkylene triol of molecular weight ca. 3000 g/mol, designed as an raw material for the production of polyurethane 2K elastomers, and 1K prepolymers.
Rokopol® F3600	45 – 50	540 – 620	9082-00-2	Glycerine based polyoxyalkylene triol of molecular weight ca. 3600 g/mol, designed as an raw material for the production of polyurethane 2K elastomers, and 1K prepolymers.
Rokopol® M5000	33 – 37	700 – 960	9082-00-2	High molecular weight reactive polyoxyalkylated polyether polyol of molecular weight ca. 4800 g/mol. It is designed as an intermediate for the production of polyurethane prepolymers, 1K and 2K adhesives.
Rokopol® M5020	33 – 38	700 – 1000	9082-00-2	High molecular weight reactive polyoxyalkylated polyether polyol of molecular weight ca. 4800 g/mol. It is designed as an intermediate for the production of polyurethane prepolymers, 1K and 2K adhesives. This products provides enhanced reactivity and polarity in comparison to Rokopol M5000.
Rokopol® M6000	27 – 29	1050 – 1250	9082-00-2	High molecular weight reactive polyoxyalkylated polyether polyol of molecular weight ca. 6000 g/mol. It is designed as an intermediate for the production of polyurethane prepolymers.



PCC Rokita SA is one of the leading chemical companies operating in Central and Eastern Europe. We provide high-tech solutions in the area of chemical production to deliver unique products for a wide range of industrial applications. Our key focus is the engineering, manufacturing and distribution of chemical products vital for broad range of businesses including plastics, construction, textiles, coating, and many others. We run our activity on a global basis. Sales outside of Poland represent approximately 60% of the total company revenue. Of this revenue, the most important market is Germany, which generates about 40% of our total sales. Our product portfolio includes over 250 products that may be divided into four product groups:

- polyols
- PAG (polyalkylene glycols)
- alkalis, chlorine and chlorine derivatives
- phosphorus and naphthalene derivatives

The Company runs its activity based on strategic business units.

CHLORINE BUSINESS UNIT

The Chlorine Business Unit runs one of the most high-tech, environmentally friendly installations of membrane electrolysis. We provide – among many other products - chlorine and alkalis. Chlorine is a key raw material used in the production of 55% of all the products in the chemical industry. PCC Rokita SA is the biggest supplier of chlorine to water installations in Poland. Apart from chlorine, the unit also manufactures sodium hydroxide, chlorobenzene and hydrochloric acid.

POLYOLS BUSINESS UNIT

The Polyols Business Unit is one of the biggest European manufacturers of polyether polyols registered under the ROKOPOL® trade name. The ROKOPOL® product line finds its application mainly in the production of flexible foams, rigid foams and CASE applications. The foams are being used in the furniture industry, automotive industry and many others. The unit's other important product line is ROKOLUB® - a wide range of PAG (polyalkylene glycols) providing the base stock for lubricants.

PHOSPHORUS CHEMISTRY BUSINESS UNIT

The Phosphorus Chemistry Business Unit is the biggest producer of phosphorus flame retardants, for polyurethane foams, in Eastern Europe. We also provide naphthalene based super plasticizers for large infrastructure investments in Central and Eastern Europe. Moreover, the portfolio of the business unit also includes innovative products like polymer additives (e.g. flame retardant plasticizers, antioxidants, heat stabilizers) as well as fire-resistant hydraulic fluids and lubricant additives.

As a dominating business entity, PCC Rokita SA runs the PCC Capital Group, which includes over a dozen companies operating mainly in the chemical industry and specialist services industry. These companies provide services both for the PCC Capital Group and for the external market. The strategic investor of the PCC Rokita Group is the German company - PCC SE, which operates on multiple international markets including raw materials for chemistry, transport, energy, coal, coke, fuels, plastics and metallurgy. The International PCC SE Group consociate 82 companies operating in 18 countries of the world.



PCC Rokita SA
Sienkiewicza St. 4
56-120 Brzeg Dolny, Poland

Please visit our capital group business platform:

www.products.pcc.eu

The information in the catalogue is believed to be accurate and to the best of our knowledge, but should be considered as introductory only. Detailed information about products is available in TDS and MSDS. Suggestions for product applications are based on our the best of our knowledge.

The responsibility for the use of products in conformity or otherwise with the suggested application and for determining product suitability for your own purposes rests with the user.

All copyright, trademark rights and other intellectual and industrial property rights and the resulting rights to use this publication and its contents have been transferred to PCC Rokita SA or its licensors. All rights reserved.

Users/readers are not entitled to reproduce this publication in whole or in part, nor are they entitled to reproduce it (excluding reproduction for personal use) or to transfer it to third parties.

Permission to reproduce it for personal use does not apply in respect to data used in other publications, in electronic information systems, or in other media publications. PCC Rokita SA shall not be responsible for data published by users.

pcc
ROKITA

*let's speak your
products*