

Polyols for flexible applications



PCC Rokita – Polyols Business Unit

Company's core business is production of polyether polyols with the brand name Rokopol®. For over forty years of polyols production, the company has always been striving to improve the quality of products. By increasing production capacity, expanding the portfolio of products and development of technical consultancy, PCC Rokita aims to meet the growing requirements of its customers from the dynamically developing polyurethanes sector. We offer a wide range of polyols for the production of flexible foams for furniture, mattress and automotive industries, rigid foams for construction and appliance manufacturing industries as well as polyols for CASE applications (Coatings, Adhesives, Sealants and Elastomers).

APPLICATIONS	ROKOPOL®
High Resilience and Moulded foams	iPoltec®, MH2012, MH2000, M5000, M5020, M6000, M6010, MS5225, MS5240, M1170, M1180, M1160
Viscoelastic, Hypersoft, Gel Foam	M1170, M1180, vTec 8020, vTec 8030, vTec 8050, vTec 8060, vTec 8180, vTec 8840, vTec 8911, v700, vTec 8080, vTec 8060
Conventional, Technical and CME foams	RF2000, F3000, F3600, FS3640

Marketing Expertise & Technical Service

PCC Rokita has in-depth expertise in PU chemistry going back well over forty years. Together with our team of international marketing and technical service professionals, with their comprehensive knowledge of both the end-user market and foam manufacturing, we can help you optimize your existing operations and help develop new innovative products.



Our tailor made Rokopol®vTec polyols offer superior long lasting memory foams that feature:

- Viscoelastic properties over a wide temperature range
- Comfort also at low temperatures
- Extremely high air permeability
- Broad density and hardness range

By choosing the right Rokopol®vTec polyols, you can use TDI T80 and produce both pneumatic and air permeable viscoelastic foams. PCC Rokita offers an extensive choice of MDI solutions which together with Rokopol®vTec polyols can produce memory foams with a wide glass transition temperature range. Furthermore, we are able to offer solutions that give you viscoelastic foams with air permeability of up to 4-6 L/s measured according to DIN EN ISO 7231.

Rokopol for Viscoelastic Foam

PRODUCT NAME	HYDROXYL NUMBER [mg KOH/g]	VISCOSITY AT 25 °C [mPa*s]	DESCRIPTION AND BENEFITS OF POLYOLS DESIGNED FOR VISCOELASTIC, HYPERSOFT AND GEL FOAM PRODUCTION.	MDI	TDI
Rokopol® vTec 8020	177 - 193	200 - 400	Ready to use low viscosity polyol for TDI T80 based viscoelastic foam production. This polyol, combined with Rokopol M1170 to adjust breathability, helps to produce viscoelastic foam with good airflow.		•
Rokopol® vTec 8030	177 - 193	200 - 400	Ready to use, better performance solution in terms of delayed yellowing time and lower emission of VOC and FOG. Low viscosity polyol for TDI T80 based viscoelastic foam production. This polyol, combined with Rokopol M1180 to adjust breathability, helps to produce viscoelastic foam with good airflow.		•
Rokopol® vTec 8050	190 - 210	350 - 600	Ready to use low viscosity polyol for TDI T80 based viscoelastic foam production. Combines with Rokopol M1170 to adjust breathability, helps to produce memory foam with high air permeability. Hardness can be increased up to 6 kPa by adjusting the TDI index.		•
Rokopol® vTec 8060	190 - 210	350 - 600	Ready to use low viscosity polyol for TDI T80 based viscoelastic foam production. Combines with Rokopol M1170 to adjust breathability, helps to produce memory foam with high air permeability. Hardness can be increased up to 6kPa by adjusting the TDI index. Better performance solution in terms of delayed yellowing time and lower emission of VOC and FOG.		•
Rokopol® vTec 8080	160 - 174	200 - 400	Polyol for TDI T80 based viscoelastic foam production. vTec 8080 combined with M1170 allows to produce visco foam with good air flow parameters, Tg, silky, soft touch as well as broad range of density (starts from 30 kg/m3). Good block shape.		•
Rokopol® vTec 8180	180 - 205	250 - 450	Polyol specially designed for the production of MDI viscoelastic foam with a wide Tg and exceptional breathability - can provide airflow of 4-6 L/s (8.5-12 cfm) according to EN ISO 7231, offering similar properties over the full ambient temperature range.	•	
Rokopol® vTec 8840	155 - 175	400 - 600	Polyol specially designed for the production of MDI viscoelastic foam with a wide Tg and exceptional breathability - can provide airflow of 4-6 L/s (8.5-12 cfm) according to EN ISO 7231, offering similar properties over the full ambient temperature range as well as broad range of density.	•	
Rokopol® vTec 8860	110 - 125	400 - 600	Polyol for MDI based foam. Combined with M1170, allows to produce viscoelastic foam with good air flow, Tg, silky soft touch, broad range of density (starts from 35kg/m3). Good block shape.	•	
Rokopol® vTec 8911	135 - 150	450 - 650	Polyol specially designed for the production of MDI viscoelastic foam with a wide Tg and exceptional breathability - can provide airflow of 4-6 L/s (8.5-12 cfm) according to EN ISO 7231, offering similar properties over the full ambient temperature range. Easy to use on foaming machines with limited number of polyol lines.	•	
Rokopol® V700	225 - 250	220 - 270	Triol of molecular weight 700MW used in production of viscoelastic polyurethane foams.	•	•

Rokopol for Hypersoft Foam

PRODUCT NAME	HYDROXYL NUMBER [mg KOH/g]	VISCOSITY AT 25 °C [mPa*s]	DESCRIPTION AND BENEFITS OF POLYOLS DESIGNED FOR VISCOELASTIC, HYPERSOFT AND GEL FOAM PRODUCTION.	MDI	TDI
Rokopol® M1160	31 - 36	1250 - 1550	High ethylene oxide content polyether polyol, for the production of soft & hypersoft foams. Highly recommended for low density hypersoft foams.	•	•
Rokopol® M1170	31 - 36	1250 - 1550	High ethylene oxide content polyether polyol, for the production of soft & hypersoft foams. Is used for final adjustment of recovery time and hardness in TDI/MDI based memory foam.	•	•
Rokopol® M1180	31 - 36	1250 - 1550	Better performance version of M1170 polyether polyol, with improved properties of flexible foams in terms of delayed yellowing time and lower emission of VOC and FOG. For the production of soft & hypersoft foams, is also used for final adjustment of recovery time and hardness in TDI/MDI based memory foam.	•	•



iPoltec® technology

Our innovative iPoltec® technology allows you to produce flexible HR foam with:

- Outstanding comfort and durability characteristics
- Exceptionally high resilience
- Very low emissions
- Advantageous flame retardant properties

This technology also offers high material efficiency such as class leading block shape, excellent density and hardness distribution across the block profile and good green strength for easy fresh block handling. Furthermore, the use of either solid and/or liquid fire retardants, allow iPoltec® foams to meet UK Fire Requirements with ease, even at low densities.

PRODUCT NAME	HYDROXYL NUMBER [mg KOH/g]	VISCOSITY AT 25 °C [mPa*s]	DESCRIPTION AND BENEFITS OF IPOLTEC® FOR HIGH RESILIENCE FOAMS
Rokopol® iPoltec®	47 - 56	2500 - 5500	Reactive, copolymer polyol dispersion. Designed for the production of high resilience (HR) and combustion modified high resilience (CMHR) flexible foams. This polymer polyol provides hardness without the use of styrene acrylonitrile (SAN), hence extremely low VOCs with significantly enhanced fire & flame retardancy. Rokopol® iPoltec® enables the production of a very wide range of foam densities and levels of hardness.

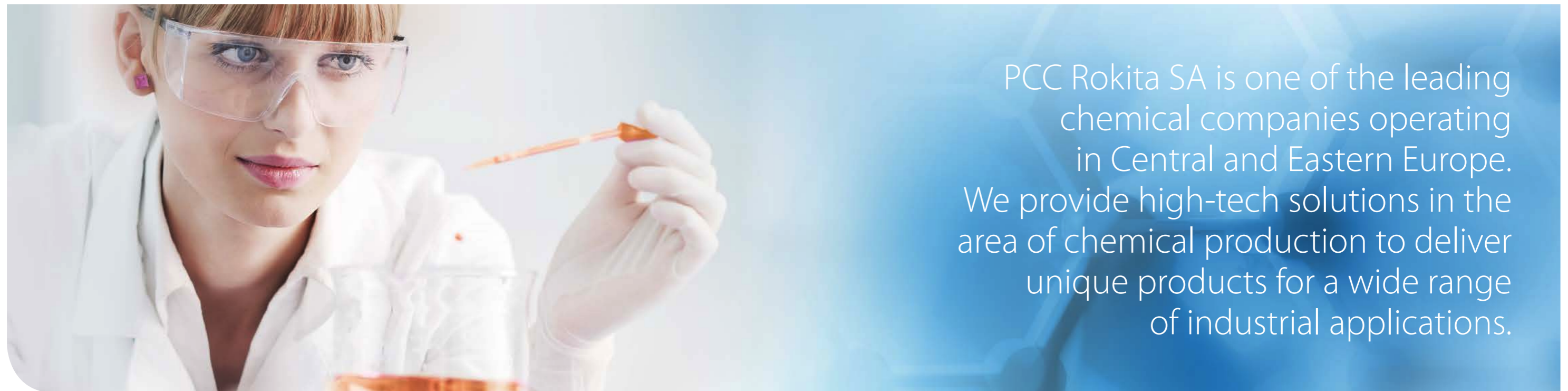
Rokopol for High Resilience Foam

PRODUCT NAME	HYDROXYL NUMBER [mg KOH/g]	VISCOSITY AT 25 °C [mPa*s]	DESCRIPTION AND BENEFITS OF POLYOLS FOR HIGH RESILIENCE FLEXIBLE FOAMS
Rokopol® MH2012	27 - 30	1500 - 2500	High functionality, styrene acrylonitrile modified, reactive copolymer polyol used for the production of high resilience (HR) flexible slabstock foams.
Rokopol® MH2000	28 - 31	1200 - 1700	High functionality, clear, reactive polyether polyol used for the production of high resilience (HR) flexible foams.
Rokopol® M5000	35 - 37	700 - 900	Clear, reactive 4850 molecular weight polyether polyol, designed as an intermediate for the production of polyurethane prepolymers.
Rokopol® M5020	33 - 38	700 - 1000	Clear, reactive 4850 molecular weight polyether polyol for the production of HR slabstock and moulded foam.
Rokopol® M6000	27 - 29	1050 - 1250	Clear, reactive 6000 molecular weight polyether polyol for the production of HR slabstock and moulded foam.
Rokopol® M6010	27 - 29	1050 - 1250	Clear, reactive 6000 molecular weight polyether polyol for the production of HR slabstock and moulded foam. Is slightly more reactive in compare to M6000.
Rokopol® MS5225	25 - 29	2000 - 2600	Reactive, copolymer polyol modified with 25% styrene acrylonitrile (SAN). It is used for the production of high resilience flexible slabstock foams.
Rokopol® MS5240	20 - 23	4000 - 8000	Reactive, copolymer polyol modified with 40% styrene acrylonitrile (SAN). It is used for the production of high resilience flexible foams.



PCC Rokita SA

Innovations for the future



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.

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

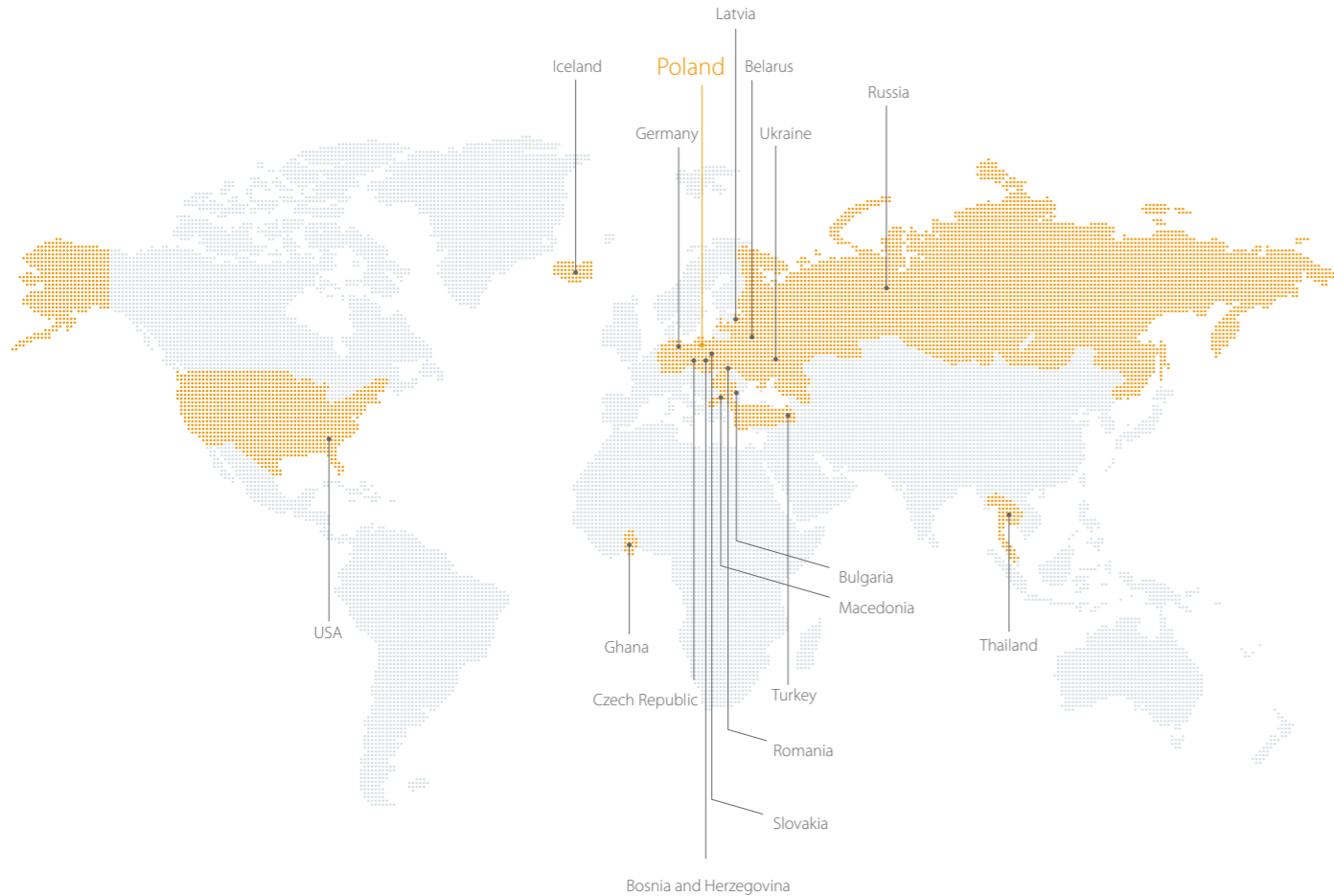
The Polyols Business Unit is one of the biggest European manufacturers of polyether polyols registered under the ROKOPOL® trade name. The ROKOPOL® product line finds its application mainly in the production of flexible foams, rigid foams and CASE applications. The foams are being used in the furniture 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 78 companies operating in 17 countries of the world.

PCC Group in the world



PCC Rokita SA

PCC Rokita Capital Group, 22 companies, including:

- PCC Rokita SA**
- PCC Prodex Sp. z o.o.
- PCC Prodex GmbH (Germany)
- PCC PU Sp. z o.o.
- IRPC PCC Co. Ltd. (Thailand)
- PCCTherm Sp. z o.o.

PCC EXOL SA

PCC EXOL Capital Group, 5 companies, including:

- PCC EXOL SA**
- PCC Chemax Inc. (the USA)
- PCC EXOL Kimya Sanayi Ve Ticaret Limited Şirketi (Turkey)

PCC CP Kosmet Sp. z o.o.

Capital Group PCC CP Kosmet, 3 companies, including:

- PCC CP Kosmet Sp. z o.o.**
- OOO PCC Consumer Products Navigator (Belarus)
- OOO PCC Consumer Products (Russia)

PCC MCAA Sp. z o.o.

PCC Autochem Sp. z o.o.

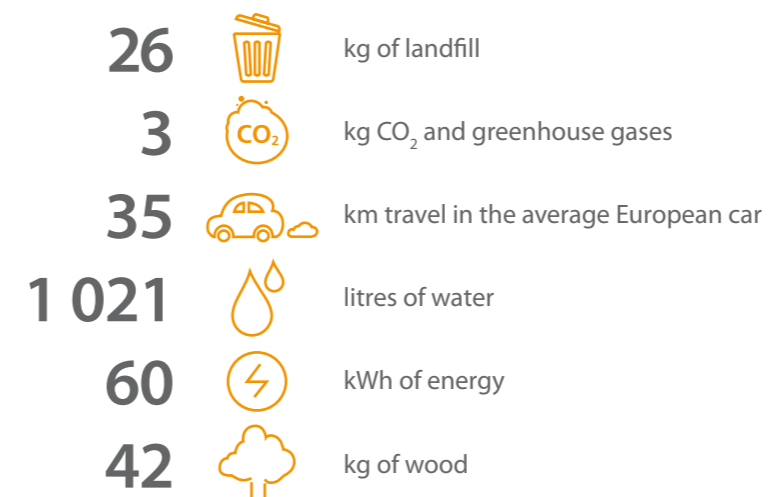
PCC Intermodal SA

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Brand	Cocoon Silk
Grammage	250
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Please visit our capital group business platform:

www.products.pcc.eu

Rokopol® Vtec

ipoltec™

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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.

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*let's speak your
products*