

PCC Rokita – Chemistry Driving the Future

Chlorine Business Unit

Production of chlorine and derivatives for various applications. Our portfolio includes Propylene oxide (PO), hydrochloric acid, caustic lye, hypochlorite, monochlorobenzene and dichlorobenzene.

Polyols Business Unit

Raw materials for polyurethane foams (flexible, OCF and rigid) as well as for CASE applications. We offer polyether polyols, polymeric polyols, polyester polyols, prepolymers.

Phosphorus Chemicals Business Unit

Specialized phosphorus and naphthalene derivatives: plasticizers, flame retardants, lubricant additives, superplasticizers for concrete.

Lubricants Business Unit

Advanced additives for lubricants, including anti-wear and extreme-pressure additives, corrosion inhibitors, emulsifiers and antioxidants.

Our values

and Personal Care

Products

Energy

- Innovation and quality world-class technologies and R&D.
- Sustainability responsible production and care for the environment.
- Partnership and trust delivering solutions that transform industry and support the future of Europe.

Key Business Segments of the PCC Group

PCC ROKITA SA PCC PCC PCC PCC EXOL SA **PCC PCG ROKITA SA ROKITA SA PCC CHEMAX INC SYNTEZA OXYALKYLATES PCC PCG OXYALKYLATES IRPC Polyols** Chlorine **Phosphorus** Surfactants Alkylphenols • Polyether polyols Chlorine Phosphorus derivatives Anionic surfactants Nonylphenol · Polyester polyols Monochloroacetic acid Naphthalene derivatives Cationic surfactants Dodecylphenol Prepolymers Other Chlorine Polycarboxyethers (PCE) Nonionic surfactants Tristyrylphenol · Polyurethane Systems Downstream Product · Amphoteric surfactants (betaines) Chemical formulation PCC CONSUMER PCC PCC PCC PCC **PRODUCTS SA ROKITA SA INTERMODAL SA** BAKKISILICON HF. SE Consumer Holding Silicon Energy Logistics **Products** & Projects · Household & industrial Renewable Energy Intermodal transport Microsillica · Portfolio Management Cleaners, Detergents Conventional Road Haulage Silicon Metal Project Development

Rail Transport



CASE applications

Polyether and polyester polyols for CASE applications

Product name	Minority components (additives)	General purpose polyols for adhesive, sealant, elastomer	Polyether polyols for 1K adhesive (NCO prepolymers)	Polyether polyols for semi-rigid PUR insulation	Hydroxyl number [mg KOH/g]	Dynamic viscosity at 25°C [mPa·s]	Description
Rokopol® D200	•	•	•	•	495 – 535	45 – 65	
Rokopol® D450	•	•	•	•	230 – 270	60 – 80	
Rokopol® D1002	•	•	•	•	108 – 116	130 – 170	
Rokopol® D2002		•	•		53 – 59	280 – 380	
Rokopol® DE2020		•	•		53 – 59	280 – 400	
Rokopol® DE4020		•	•	•	27 – 31	700 – 900	
Rokopol® DE4030*			•		26 – 30	700 – 1 200	Polyols for production
Rokopol® G400	•	•		•	370 – 400	250 – 400	of 1K and 2K CASE materials
Rokopol® G441	•	•		•	330 – 360	250 – 310	such as:
Rokopol® G500	•	•		•	290 – 310	240 – 340	- adhesive for out- and indoor
Rokopol® G700	•	•			225 – 250	220 – 270	applications ie. wood, stone carpet, mineral
Rokopol® G1000	•	•	•		155 – 165	200 – 300	wool, rubber including
Rokopol® F3600		•	•	•	45 – 50	540 – 620	sport flooring and acoustic
Rokopol® M5020		•	•	•	33 – 38	700 – 1 000	insulation, anchor systems
Rokopol® M6000		•	•	•	27 – 29	1 050 – 1 250	and tunnelling systems, artificial turf,
Rokopol® M6025*		•	•	•	27 – 29	1 050 – 1 250	- primers for
Rokopol® M1140*			•	•	39 – 43	850 – 1 050	metal faced sandwich
Rokopol® M1170			•	•	31 – 36	1 250 – 1 550	panels,
Rokopol® RF2000		•			160 – 170	500 – 700	 coating for concrete and metal,
Rokopol® RF551		•		•	400 – 440	3 000 – 5 000	water proofing systems,
Rokopol® GS364*		•		•	340 – 380	2 000 – 4 000	polyurea- polyurethane
Rokopol® GS484*		•		•	465 – 505	6 500 – 10 000	elastomers and gels.
Rokester® C1610		•			155 – 170	1 000 – 4 000	
Rokester® C1520		•			150 – 165	2 000 – 3 300	
Rokopol® RF170		•		•	500 – 520	300 – 500	
Rokester® 2600		•			250 – 270	2 500 – 4 500	
Rokester® 2700		•			250 – 270	2 500 – 4 500	
Rokester® 3110		•			300 – 330	2 000 – 3 000	

^{*}on request

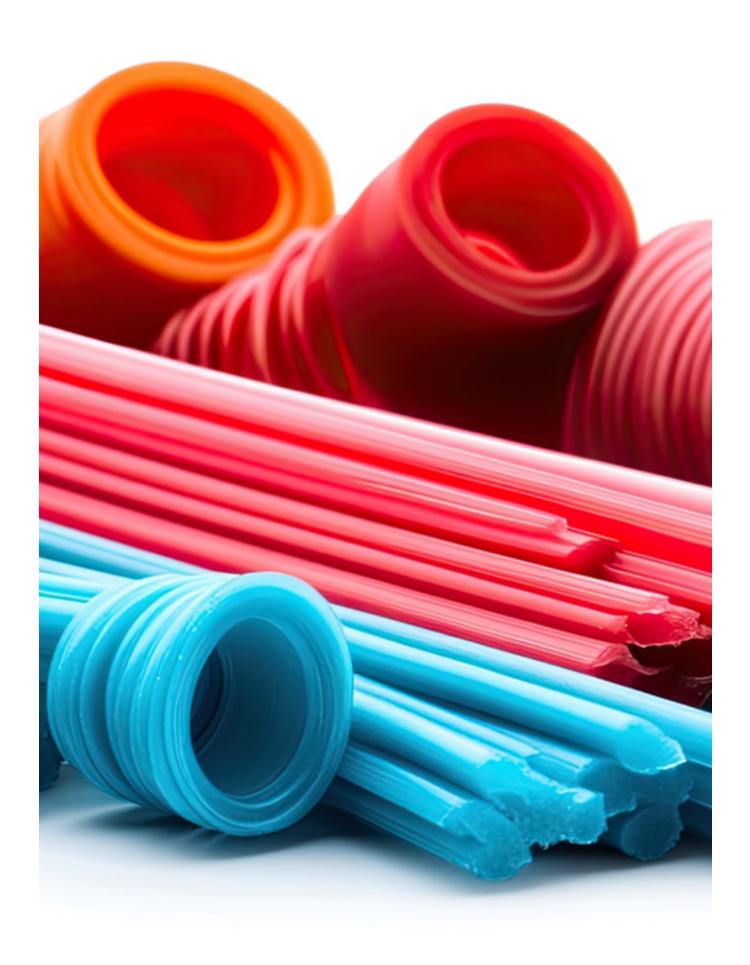
Reactive plasticizers for polyurethane CASE materials*

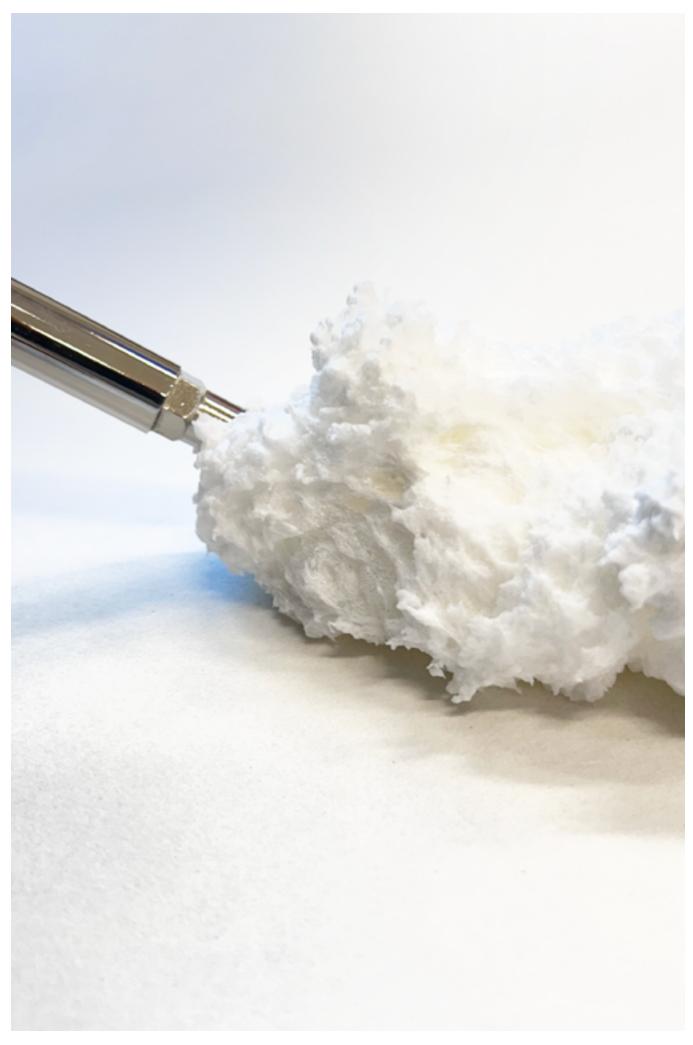
Product name	Hydroxyl number [mg KOH/g]	Dynamic viscosity at 25°C [mPa·s]	Molecular weight [g/mol]	Description			
Hydrophilic & read	ctive, EO/PO						
Rokopol® 50-B-32	75 – 85	50 – 100	700				
Rokopol® 50-B-46	50 – 60	100 – 150	1 100				
Rokopol® 50-B-150	25 – 32	300 – 400	1 800	Specially designed polyol line of broad range of MW used as reactive plasticizers for various PU application. These products exhibit improved hydrophilicity,			
Rokopol® 50-B-330	18 – 26	700 – 900	2 700	rol various Fo application. These products exhibit improved hydrophilicity, reduced processing time and ability to decrease surface stickiness.			
Rokopol® 50-B-680	10 – 20	1 500 – 2 000	3 800				
Rokopol® 50-B-1000	7 – 15	2 000 – 2 800	5 500				
Hydrophobic, PO							
Rokopol® P-B-32	70 – 80	50 – 100	750				
Rokopol® P-B-46	48 – 56	80 – 150	1 050				
Rokopol® P-B-50	48 – 56	70 – 150	1100	Specially designed polyol line of broad range of MW used as reactive plasticizers			
Rokopol® P-B-68	42 – 52	120 – 200	1 200	for various PU application. These products show improved hydrophobicity, increased resistance to moisture and hydrolysis as well as good adhesive			
Rokopol® P-B-150	27 – 37	200 – 350	1 900	properties.			
Rokopol® P-B-220	20 – 30	350 – 550	2 500				
Rokopol® P-B-320	7 – 19	700 – 1 000	4 600				
High hydrophobic	& low reactivit	y, PO/BO					
Rokopol® MOS 68	42 – 52	100 – 200	1 150	_ Specially designed polyol line of medium MW used as reactive plasticizers for			
Rokopol® MOS 100	35 – 45	150 – 300	1 400	various PU application. These products offer significant hydrophobicity, reduced reactivity, improved resistance to moisture and hydrolysis as well as good			
Rokopol® MOS 220	15 – 30	400 – 600	2 450	adhesive properties.			
High hydrophobio	High hydrophobic & very low reactivity, BO						
Rokopol® MOS 460	13 – 30	800 – 1400	2 450	Specially designed high MW product line, developed for various PU application as a less reactive plasticizer. Products present outstandingly high level of			
Rokopol® MOS 680	10 – 20	500 – 1 200	3 700	hydrophobicity, increased resistance to moisture and hydrolysis as well as good adhesive properties.			

Polyether polyols for 2K polyurethane elastomers and gels*

Product name	Hydroxyl number [mg KOH/g]	Dynamic viscosity at 25°C [mPa-s]	Description
Rokopol® EP1465.01	38 – 47	300 – 900	Polyether polyols for manufacturing polyurethane elastomers and gels with aromatic or aliphatic isocyanates (hot cure). Changing the ratios of these two polyols in the compositions, PU elastomers/ gels of various mechanical properties — can be obtained (for example, having hardness ranging from \$h00 < 5 up to
Rokopol® EP1555.01	27 – 37	400 – 1 200	Sh00 = 60). Pot life is controlled by catalyst content and curing temperature. Applications: shock absorbing materials, high comfort gel pillows and mattresses, gel bicycle seats, pieces with various hardness, non-slip phone pads, gaskets resistant to mineral oils, other parts resistant to hydrophobic liquids.

^{*}on request





One Component Foam applications

Standard polyether polyols for OCF

Product name	Hydroxyl number [mg KOH/g]	Dynamic viscosity at 25°C [mPa·s]	Molecular weight [g/mol]	Description
Rokopol® D450	230 – 270	60 – 80	450	Low viscosity diol with higher hydroxyl value used as an additive for the production of specialized OCF foam.
Rokopol® D1002	108 – 116	130 – 170	1 000	Polyoxypropylene glycol often used as an additive in OCF systems. Improves cellular structure and skin texture also reduces friability of the foam.
Rokopol® D2002	53 – 59	280 – 380	2 000	Polyoxypropylene glycol used as one of the main components in OCF adhesive systems. Improves cellular structure and helps to reduce friability of the foam.
Rokopol® G441	330 – 360	250 – 310	500	Glycerine based triol of a high reactivity. Due to its noticeable cross-linking properties often used to improve mechanical properties.
Rokopol® G500	290 – 310	240 – 340	560	Glycerine based triol used to improve mechanical properties.
Rokopol® G700	225 – 250	220 – 270	700	Glycerine based triol often used as an additive to enhance dimensional stability and mechanical properties.
Rokopol® G1000	155 – 165	200 – 300	1 000	Main triol for OCF with low sodium and potassium content.

Polyether and polyester polyols for megafoam OCF

Product name	Hydroxyl number [mg KOH/g]	Dynamic viscosity at 25°C [mPa·s]	Molecular weight [g/mol]	Description
Rokopol® iCan 2432*	145 – 160	150 – 250	900	Special polyether polyol for high-performance OCF foams. Its main advantage is improved foam yield and noticeably finer and regular cellular structure. Polyol is intended for use as a base polyol.
Rokopol® iCan 4100*	150 – 165	200 – 350	1 000	Specially designed polyether polyol dedicated for winter OCF foams with improved yield. Foam based on this polyol exhibity reduced friability, tack free and cutting times. It can be used as a base polyol.
Rokester® 1711	185 – 195	2 500 – 3 500	n/a	Special, less aromatic polyester polyol with very low reactivity, high loading level possible.
Rokester® 2600	250 – 270	2 500 – 4 500	n/a	Aromatic polyester for OCF with controlled reactivity.
Rokopol® D450	230 – 270	60 – 80	450	Less viscous diol with higher hydroxyl value used as an additive for the production of specialized OCF foam.
Rokopol® G441	330 – 360	250 – 310	500	Highly reactive glycerine based triol. Due to its noticeable cross-linking properties can improve mechanical properties.
Rokopol® G500	290 – 310	240 – 340	560	Glycerine based triol used to improve mechanical properties.

^{*}on request

Polyether polyols for winter OCF

Product name	Hydroxyl number [mg KOH/g]	Dynamic viscosity at 25°C [mPa·s]	Molecular weight [g/mol]	Description
Rokopol® iCan 2770*	150 – 170	200 – 350	1 000	Special polyether polyol for the use as additive in winter OCF foams additive for winter OCF foams. It noticeably reduces the tack free- and cutting time. In selected formulations the yield is increased. Content in polyol blend up to 50 wt%.
Rokopol® iCan 4100*	150 – 165	200 – 350	1 000	Special polyether polyol dedicated for winter OCF foams with improved yield. Foam based on this polyol is characterized by reduced friability, tack free and cutting times. It can be used as a base polyol.

Polyether and polyester polyols for economic OCF

Product name	Hydroxyl number [mg KOH/g]	Dynamic viscosity at 25°C [mPa·s]	Molecular weight [g/mol]	Description
Rokopol® iCan 2672*	150 – 170	50 – 150	700	Special polyether polyol for OCF with high content of chlorinated paraffin.
Rokopol® iCan 2850*	225 – 250	180 – 280	700	Special polyether polyol for OCF with high content of chlorinated paraffin. It reduces the tack free- and cutting time.
Rokester® 3110	300 – 330	2 000 – 3 000	n/a	Aromatic polyester polyol for summer OCF foams with high hydroxyl number.

Polyether polyols with increased elasticity for OCF

Product name	Hydroxyl number [mg KOH/g]	Dynamic viscosity at 25°C [mPa·s]	Molecular weight [g/mol]	Description
Rokopol® EP2455.01*	35 – 40	700 – 900	4 800	Special polyether polyol for the production of viscoelastic OCF with excellent dimensional stability. Content in polyol blend up to 30wt%.
Rokopol® iCan 2812*	105 – 115	200 – 550	1 500	Special polyether polyol for the production of OCF with increased elasticity. Content in polyol blend up to 80wt%.
Rokopol® iCan 2823*	73 – 83	250 – 600	2 000	Special polyether polyol for the production of OCF with increased elasticity. Content in polyol blend up to 50wt%.

Polyether and polyester polyols for foam adhesive

Product name	Hydroxyl number [mg KOH/g]	Dynamic viscosity at 25°C [mPa·s]	Molecular weight [g/mol]	Description
Rokopol® iCan 2770*	150 – 170	200 – 350	1 000	Special polyether polyol dedicated as an additive for fast foam adhesives. It noticeably reduces the tack free time and improves green strength.
Rokester® C1520	150 – 165	2 000 – 3 300	n/a	Branched polyol with high bio-content and low reactivity.
Rokester® C1610	155 – 170	1 000 – 1 400	n/a	Branched polyol with very high bio-content and low reactivity.

B1 and B2 class fire resistant OCF

Product name	Hydroxyl number [mg KOH/g]	Dynamic viscosity at 25°C [mPa·s]	Molecular weight [g/mol]	Description
Rokester® DP1500.01*	145 – 155	1 500 – 2 500	n/a	Special aliphatic-aromatic polyester polyol with great fire resistant properties. Depending on the formulation can improve the yield of the foam. High loading level possible, up to 40 pphp.
Rokester® 1600*	150 – 170	1 000 – 3 000	n/a	Special aliphatic polyester polyol with very low reactivity, allows reduction of pMDI consumption. Depending on the formulation can improve the yield of the foam. High loading level possible, up to 40 pphp.
Rokester® 1711	185 – 195	2 500 – 3 500	n/a	Special aliphatic polyester polyol with very low reactivity. High loading level possible, up to 40 pphp.
Rokester® 2600	250 – 270	2 500 – 4 500	n/a	Controlled reactivity Aromatic PET based polyester polyol for OCF, up to 25 pphp with controlled reactivity.

Polyether polyols designed for faster curing

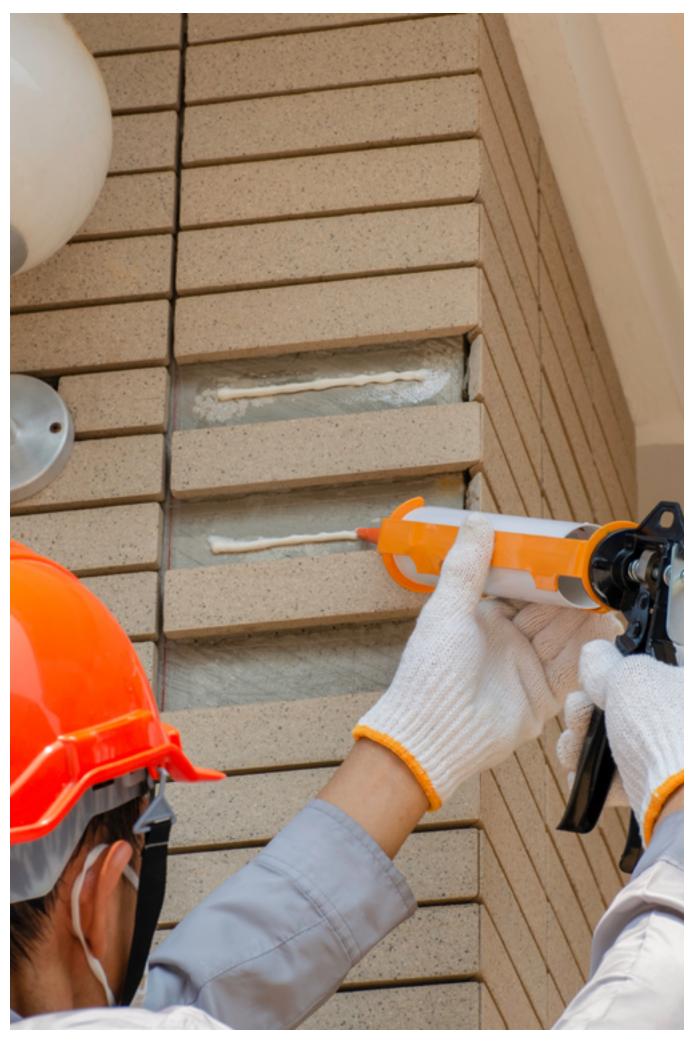
Product name	Hydroxyl number [mg KOH/g]	Dynamic viscosity at 25°C [mPa·s]	Molecular weight [g/mol]	Description
Rokopol® iCan 2770*	150 – 170	200 – 350	1 000	Special polyether polyol used as an additive for winter OCF foams. It noticeably reduces the tack free- and cutting time. In selected formulations the yield is increased. Content in polyol blend up to 50 wt%.
Rokopol® iCan 2850*	225 – 250	180 – 280	700	Special polyether polyol for the production of one-component foam with high content of chlorinated paraffin. It reduces the tack free- and cutting time. Loading level up to 50 wt% in economic foam formulation.

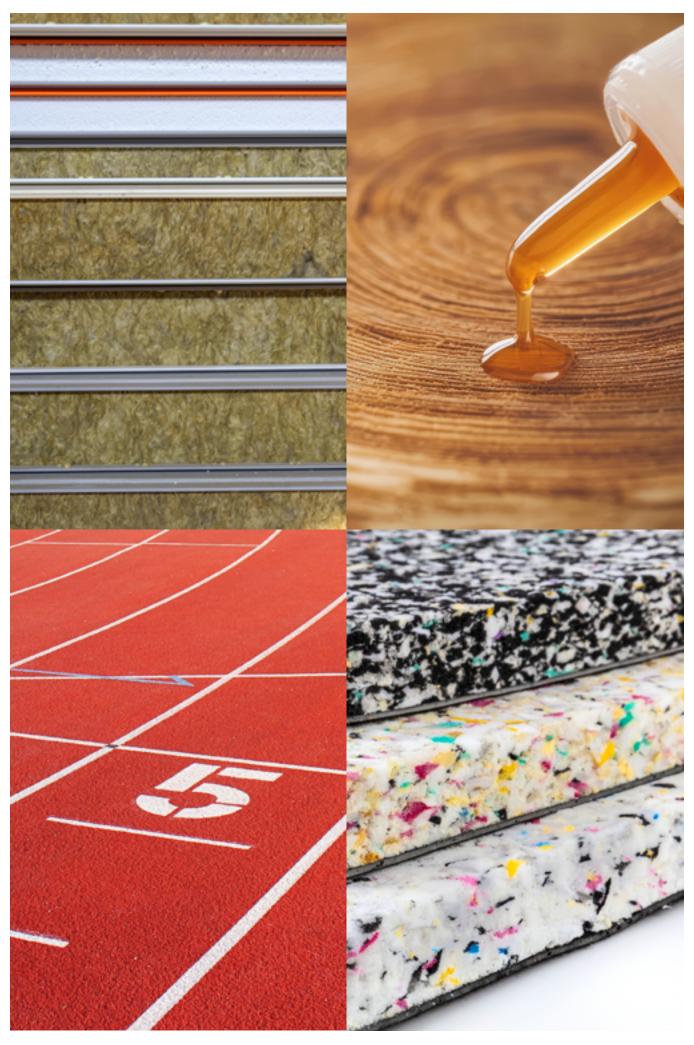
Polyester polyols based on recycled & bio-materials

Product name	Hydroxyl number [mg KOH/g]	Dynamic viscosity at 25°C [mPa·s]	Description
Rokester® C1520	150 – 165	2 000 – 3 300	Branched polyol with high bio-content and low reactivity. Polyol dedicated for anti-rust and concrete coating.
Rokester® C1610	155 – 170	1 000 – 1 400	Branched polyol with high bio-content and low reactivity. Polyol dedicated for anti-rust and concrete coating.
Rokester® DP 1720.01*	160 – 180	1 500 – 2 100	Aliphatic-aromatic polyester polyol intended for the production of OCT based on recycled PET and bio-content.
Rokester® 2600	250 – 270	2 500 – 4 500	Aromatic recycled PET based polyester polyol for OCF and rigid foam with controlled reactivity.
Rokester® DP 1730.02*	180 – 190	1 500 – 3 000	Special aliphatic polyester polyol with very low reactivity. Very high loading level in OCF formulation possible, up to 40 pphp. Product is based on bio raw materials.

^{*}on request







Prepolymers

Prepolymers

Product name	Dynamic viscosity at 25°C [mPa·s]	NCO content [wt%]	Description			
Wood adhesives						
Rokanate M PE 1602	3 000 – 5 000	15.5 – 17.0	1K polyurethane waterproof adhesive of moderate reactivity for wood with heat resistance according to PN-EN 14257 WATT' 91 and D4 classification.			
Rokanate M PE 1602.25	3 000 – 5 000	15.5 – 17.0	1K polyurethane waterproof adhesive for wood, fast curing (open time 25 minutes) with heat resistance according to PN-EN 14257 WATT' 91 and D4 classification.			
Rokanate M PE 2401	200 – 500	24.0 – 25.0				
Rokanate M PE 2402	200 – 500	24.0 – 25.0	Universal 1 K polyurethane adhesive for production of e.g. integral foam.			
Rokanate M PE 2601	300 – 450	25.4 – 26.4	1K polyurethane adhesive, high stiffness joint, dedicated for light woodbased boards (LDF).			
Rokanate M PE 2602	250 – 400	25.5 – 27.0	1K polyurethane adhesive, high stiffness joint, dedicated for light wood-based boards (LDF).			
Rubber (SBR, EPDM)	Rubber (SBR, EPDM) adhesives					
Active Play AS H 8008	2 500 – 4 000	9.0 – 10.0	1K polyurethane adhesives for outdoor applications, including the production of: - cold and hot cure SBR/EPDM molded elements, - general purpose sport flooring application, including colored EPDM.			
Active Play AS H 8008(w)	2 000 – 4 000	9.0 – 10.0	Active Play AS H 8008 exhibits standard reactivity whereas Active Play AS H 8008(w) has shorter curing time, mainly for winter use. Products mainly for cold cure applications.			
Active Play AS H 8009	2 000 – 3 500	10.0 – 12.0	1K polyurethane adhesive for the production of: - cold and hot cure SBR/EPDM molded elements, - general purpose sport flooring application, including colored EPDM.			
Active Play AS H 8009-LR	2 500 – 4 000	7.0 – 8.0	Active Play AS H 8009 exhibits standard reactivity whereas Active Play AS H 8009-LR has longer curing time, for summer time. Product mainly for cold cure.			
Active Play AS H 8013_2	1 000 – 2 000	14.5 – 15.5	1K polyurethane adhesive for the production of hot cured molding SBR with medium viscosity and low elasticity.			
Active Play AS H 8014	2 500 – 3 500	9.0 – 10.0	1K polyurethane adhesive with medium viscosity and elasticity for the production of: - cold and hot cure SBR/EPDM molded elements, - general purpose sport flooring application, including coloured EPDM. Active Play AS H 8014 can be used with Active Play AS FR to improve flame retardancy of the final product made from SBR granules. Product for hot cure molded applications.			
Active Play AS H 8027	2 000 – 3 500	7.0 – 8.0	Medium viscosity and moderate reactivity. Elastic 1K polyurethane adhesive with moderate viscosity and reactivity for the production of rubber granulate floor protection mats (cold cure).			
Rubber (SBR, EPDM)	pigmented adh	esives				
Active Play AS C III	1500 – 2500	9.5 – 11.0				
Active Play AS C II Red	3 500 – 10 000	_	1K pigmented polyurethane adhesive for the production of sport flooring including coloured EPDM and for the production of cold and hot cure SBR/EPDM moulded elements. Product dedicated mainly for hot cure. Active Play AS C II Green-LV2 has lower viscosity than Active Play AS C II Green.			
Active Play AS C II Green	3 000 – 8 000	_				
Active Play AS C II Grey-P	3 000 – 7 000					
Rubber (SBR, EPDM) pigmented adhesives (spray application)						
Active Play AS N Red-LV2	1 500 – 2 700	-	Polyurethane coating of low viscosity dedicated for out-door use for SBR surface applied by: - spraying technique mixed with rubber granules Active Play AS N Red-LV2 has lower viscosity than Active Play AS N Red.			
Active Play AS N Green	1 000 – 3 500	-				

Prepolymers

Product name	Dynamic viscosity at 25°C [mPa·s]	NCO content [wt%]	Description				
2K adhesives for mineral wool							
Rokanate F2C 0002_05	4 500 – 8 500	-	Rokanate F2C 0002_03 is fast curing, 2K polyurethane adhesive with filler, intended for bonding mineral wool, steel and aluminum. Applied with mass ratio 100:30 with polymeric MDI. Rokanate F2C 0002_05 has longer open time, dedicated mainly for summer use.				
2K primer for sandw	rich panel						
RokaPur PR2K_100	800 – 1 200	-	RokaPur PR2K_100 is polyol component for 2K polyurethane primer for rigid faced sandwich panel production. Can be applied with low and high functionality polymeric MDI. Applied with mass ratio 100:150 with polymeric MDI. It is based on recycled component.				
Rebonding adhesives							
Rokanate M PE 0601	450 – 900	5.0 – 6.5	1K polyurethane adhesive for the production of rebonding foam blocks, high flexibility, cured with moisture, low NCO content, moderate viscosity.				
Rokanate MPE 0801	200 – 600	7.9 – 8.6	Various viscosity and moderate reactivity, 1K polyurethane adhesive of various viscosity and moderate reactivity for the production of rebonding foam blocks. High flexibility, cured with moisture. Rokanate M PE 0805 has lower reactivity, dedicated for higher temperature curing condition.				
Rokanante M PE 1501.90	700 – 1 500	15.0 – 16.0	1K polyurethane adhesive for the production of rebonding foam blocks, high flexibility, cured with moisture, medium NCO content, moderate viscosity.				
Polyurethane gels							
Rokanate M PE 0660	800 – 1800	7.5 – 8.5	Rokanate M PE 0660 is used as isocyanate component for the production of hydrophobic, remarkably elastic polyurethane gels, highly flexible coatings and joints with extremely low water absorption.				
Rokanate M PE 0820	450 – 1450	10.5 – 12.0	Rokanate M PE 0820 is used as isocyanate component for the production of hydrophobic polyurethane gels and elastomers, flexible coatings and joints with extremely low water absorption.				
Flame retardant add	litive						
Active Play AS FR	-	-	General purpose black paste applied for improving flame retardancy of moulded elements. It can be applied with NCO prepolymers, i.e. Active Play AS H 8014 and Active Play AS H 8027.				
Polyurea coating							
Rokanate M PE 1501	700 – 1 500	15.0 – 16.0	Isocyanate component for 2K polyurea spray coating.				
All-purpose adhesiv	es						
Rokanate M PE 1503.07	1 500 – 3 000	14.5 – 15.5					
Rokanate M PE 1503.15	1 500 – 3 000	14.5 – 15.5	General purpose 1K polyurethane adhesive dedicated for various purposes including: light wood-based boards (LDF), wood bonding, mineral wool with metal				
Rokanate M PE 1503.30	1 500 – 3 000	14.5 – 15.5	facers, rubber granulates, polystyrene boards, drywall boards. Moderate viscosity and wide range of open time: from 7 up to 60 minutes.				
Rokanate M PE 1503.60	1 500 – 3 000	14.5 – 15.5					
Ekopromer A008	2 500 – 3 500	8.0 – 8.9	Elastic 1K polyurethane adhesive of medium viscosity dedicated for various purposes in the polyurethane industry.				
Waterproofing							
Rokanate M PE 0201	8 000 – 13 000	1.9 – 2.5	1K polyurethane resin for manufacture of waterproofing membrane applied to protect concrete screeds, foundations and walls against moisture. It is cured with moisture.				



Polyols and prepolymers for CASE and OCF applications



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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.

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

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