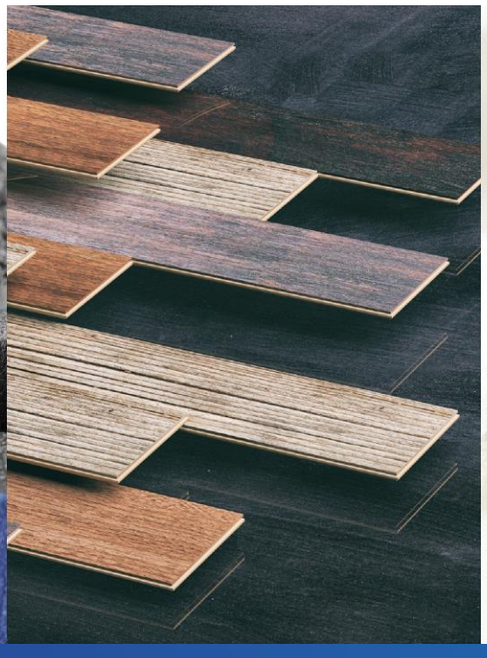




OUR INNOVATIONS & SERVICE

Wide range of polyols and solutions dedicated to PU applications in flexible and rigid foams and CASE.



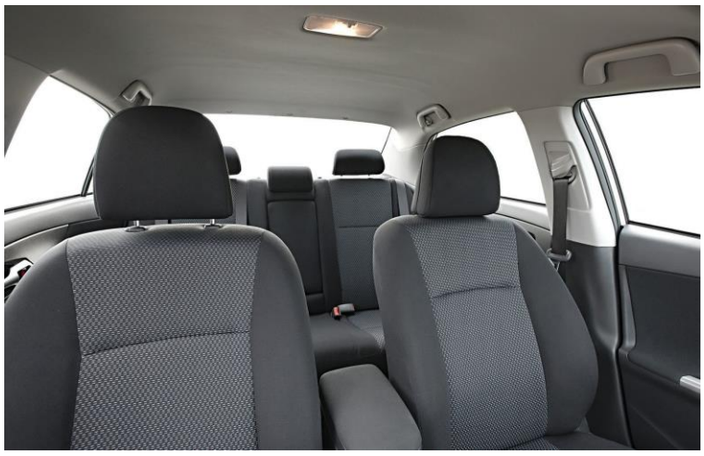
IRPC POLYOL

INGENIOUS POLYOL for New HR Polyurethane Foam

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

This polyol offers high material efficiency such as leading class block shape, excellent density and hardness distribution profile across the block with good green strength for easy fresh block handling. In addition, it allows the production of wide range of density (even at low density) and hardness CMHR foam that meets UK Fire Requirements with only liquid flame retardants additive. Thus, enable the exclusion of melamine.

SyncoPol®	Hydroxyl Number	Viscosity 25ºC (cps)	Benefits & Applications
FG3002	54-58	400-600	Glycerine initiated polyether triol with BHT free AO, used for the manufacture of automotive and combustion modified flexible slabstock foam and box foam
FG3502	46-50	400-600	Glycerine initiated polyether triol with BHT free AO, used for the manufacture of automotive and combustion modified flexible slabstock foam
FG3101	53-59	400-600	General purpose, 3000 molecular weight triol with BHT free AO, for the production of conventional slabstock foam (PO/EO)
RF2000*	160-170	500-700	Sorbitol based polyether polyol used as a hardening additive in both conventional and HR foam production
iPoltec®*	47-57	2500-5000	Reactive, copolymer polyol dispersion. Specially 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), thus extremely low VOCs with significantly enhanced fire & flame retardancy. Rokopol® iPoltec® enables the production of a very wide range of foam density and hardness level. It can also be used in CME foam production to obtain high load bearing properties with significantly lower amount of flame-retardant.



VISCOELASTIC (VE) FOAMS

are temperature and body pressure sensitive. Mattresses featuring this type of foam conform to the body's shape and provide optimum support and comfort. This important feature of VE foam is the basis for a healthy and relaxing night's sleep.

Our tailored made visco-elastic polyols enable the efficient production of wide range of superior long lasting memory foams that feature:

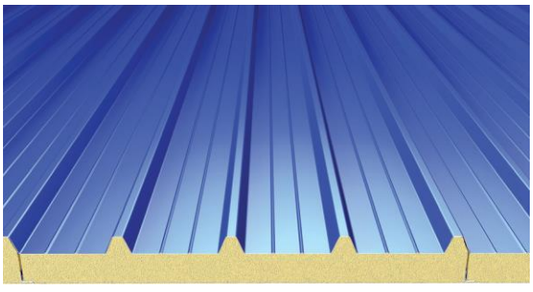
- Viscoelastic properties over a wide temperature range
- Extremely high air permeability
- High comfort even at low temperatures

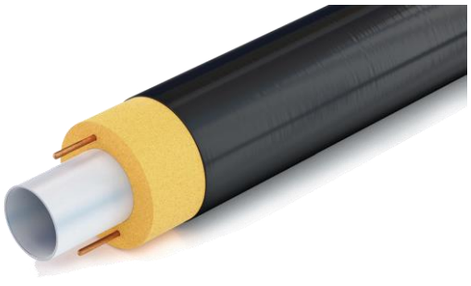
SyncoPol®	Hydroxyl Number	Viscosity 25ºC (cps)	Benefits & Applications
VF690	240-250	200-300	Glycerine based 700 MW polyoxyalkylene triol, used in production of viscoelastic polyurethane foams.
M1170*	30 - 36	1200 - 1500	High ethylene oxide content polyether polyol recommended for the production of soft & hypersoft foams. A multi-functional polyol suited as a main component in MDI based memory foam or cell opener for standard, HR and visco-elastic foam production.
8020*	177-193	200-400	Ready to use low viscosity polyol for T-80 TDI based viscoelastic foam production. Use in combination with Rokopol M1170 to adjust breathability; to produce viscoelastic foam with good airflow. It can also be used as the main component in both "gel" and "pneumatic" memory foam production.
8050*	190-210	350-600	Ready to use low viscosity polyol for T-80 based viscoelastic foam production. Combine with Rokopol M1170 to adjust breathability; to produce memory foam with high air permeability. Hardness can be increase up to 6 kPa by adjusting the TDI index.
8911*	130 -150	450 - 650	A unique polyether polyol specially developed for MDI based viscoelastic foam. Thus enabling production of memory foam with both a wide Tg and exceptional breathability (airflow of 4-6 L/s (equivalent 12 cfm), according to EN ISO 7231), with similar properties over the full domestic temperature range.

* **Products under Rokopol® tradename**

POLYETHER POLYOL for Rigid Foam

Reduction of energy consumption is one of the major challenges of our times. Our range of rigid polyols has been developed for polyurethane applications that lead to optimal thermal insulation of residential, commercial and institutional buildings. Many our products are an important part of polyurethane systems that help to decrease the loss of heat in pipe- in-pipe insulation, in the insulation of doors, gates, and roller-blinds. They are used for the production of sandwich panels with a polyurethane core. These polyols are also a main component in PU systems that prevent heat transfer by providing insulation to freezers, fridges and cold storage facilities.





SyncoPol®	Initiator	Hydroxyl Number	Viscosity 25ºC (cps)	Benefits & Applications
DL1000	Diol	107-117	120-180	High purity polyoxypropylene glycol of molecular weight ca 1000 g/mol. Designed as an low viscosity additive for the production of rigid foams. Improved flowability impart ability to fill small spaces in moulded foam.
AR300	Amine-initiated reactive	735-775	40000-50000	Reactive amine polyol for spray foam systems of high reactivity.
AR340	Amine-initiated reactive	485-515	350-450	Reactive amine polyol for spray foam systems of low viscosity
AR350	Amine-initiated reactive	620-660	16000-18000	Reactive amine polyol for spray foam systems of medium viscosity and functionality
GT1050	Glycerine	155-165	200-600	High purity polyoxypropylene triol of molecular weight 1000 g/mol. Designed as a main polyether polyol for the production of polyurethane OCF foams, low viscosity additive for modification of rigid block foam properties and skin.
GT150	Glycerine	1085-1160	1400-1650	High purity and viscosity polyoxypropylene triol of molecular weight 150 g/mol.
GT255	Glycerine	645-675	850-1050	High purity polyoxypropylene triol of molecular weight 255 g/mol with mid range OH value. Recommended for high density rigid moulding foam systems.
GT310	Glycerine	520-560	575-725	High purity polyoxypropylene triol of molecular weight 310 g/mol. A low viscosi ty additive for modification of rigid foam properties and skin, also used in high density rigid moulding foam systems.
GT370	Glycerine	430-470	400-550	High purity polyoxypropylene triol of molecular weight 370 g/mol. A low viscosi ty additive for modification of rigid foam properties and skin, also use in high density rigid moulding foam systems.
GT450	Glycerine	360-390	300-400	High purity polyoxypropylene triol of molecular weight 450 g/mol. A low viscos ity additive for modification of rigid foam properties and skin, used in high density rigid moulding foam systems.
GT690	Glycerine	240-250	200-300	A glycerine based polyoxpropylene triol of molecular weight 700 g/mol. Designed as polyether polyol for the production of polyurethane OCF foams, and also a low viscosity additive for modification of rigid foam properties and skin, as well as moulded rigid foams.

SyncoPol®	Initiator	Hydroxyl Number	Viscosity 25ºC (cps)	Benefits & Applications
MB500	Mannich based	450-490	8000-12000	Mannich based polyol containing aromatic amine of molecular weight 500 g/mol, with high functionality and medium viscosity. Used in rigid foam formulations to improve flame retardancy and reduce catalyst content. It also improves adhesion and reactivity in spray foam.
MB520	Mannich based	500 - 530	40000-50000	Mannich bases polyol containing aromatic amine of molecular weight 520 g/mol, with high functionality and viscosity. Use in rigid foam formulations to improve flame retardancy and reduce catalyst content. It also improves adhesion and reactivity in spray foams.
S340	Sorbitol	515-565	540-700	Sorbitol based polyether polyol of molecular weight of 340 g/mol and low viscosity, to achieve the mechanical properties along with flowability.
S500	Sorbitol	475-505	7500-11500	Sorbitol based polyether polyol, with molecular weight ca 500 g/mol. A general pur pose medium viscosity polyol which gives a good balance of desirable parameters like flowability, good foam rise, dimensional stability and mechanical foam properties. Also suitable for wide tem perature range; low temperature PUR foams (-35˚C) as well as higher temperatures (ca 120˚C). Improves morphology of cell foam especially in block foam.
S602	Sorbitol	445-475	11500-16500	High viscosity and functionality sorbitol based polyether polyol used in foam formulation to impart dimensional stability at extreme temperature condition. Typically used in refrigeration application.
S604	Sorbitol	365-395	2300-2800	High functionality sorbitol based polyether polyol of molecular weight 600g/mol with good flow properties.
S650	Sorbitol	430-480	3500-6500	Medium viscosity and functionality multi purpose sorbitol based polyether polyol, suitable for all rigid foam system; i.e. refrigeration
S660	Sorbitol	465-495	26000-40000	High viscosity and high functionality sorbitol based polyether polyol, recommended for high compressive strength and dimensional stability foams, suitable for struc tural foam which requires high load bearing.
SA430	Sorbitol-Amine	480-510	1800-2400	Reactive amine/sorbitol polyol of medium viscosity and high functionality. Gives good dimensional stability whilst achieving good reactivity profile. Suitable to use as co-polyol in spray foam applica tions
SR552	Sucrose	450-490	20000-26000	High viscosity sucrose based polyol, with molecular weight ~550 g/mol. A general purpose polyol with high functionality, gives good quality surface curing in rigid foam systems.
SR650	Sucrose	375-425	8000-12000	Low viscosity sucrose based polyol, with molecular weight ~650 g/mol. A general purpose polyol with high functionality, gives good quality surface curing in rigid foam systems.
SR680	Sucrose	365-395	10000-14000	Medium viscosity sucrose based polyol, with molecular weight ~680 g/mol. A general purpose polyol with high functionality, gives good quality surface curing in rigid foam systems.
SR553	Sucrose-DEG	430-460	5100-6500	General purpose medium viscosity sucrose/DEG based polyol, with mo lecular weight ~550 g/mol. A high functionality polyol with good physical foam properties, thus suitable for most rigid foam systems.
SR780	Sucrose-DEG	300-320	1500-2000	General purpose low viscosity sucrose/DEG based polyol of molecular weight ~780 g/mol. A good choice for improving suitable for most rigid foam systems. Optimizes the mechanical properties without increasing foam friability tendency.
SR490	Sucrose-DEG	475-505	5000-7000	General purpose medium viscosity sucrose/DEG based polyol, with molec ular weight ~550 g/mol, suitable for most rigid foam systems.
SR551	Sucrose-Glycerine	438-458	8300-9300	Medium viscosity sucrose/glycerine based polyol, with molecular weight ~550 g/mol. A general purpose polyol with high func tionality suitable for most rigid foam systems.
SR610	Sucrose-Glycerine	435-465	17000-19000	High viscosity sucrose/glycerine based polyol, with molecular weight ~610 g/mol. A general purpose poly- ol with high functionality suitable for most rigid foam systems.
SR670	Sucrose-Glycerine	345-375	2500-3500	Sucrose/glycerine based polyol with molecular weight of 670 g/mol. Low viscosity and medium functionality makes it a good choice for continuous and discontinuous PUR formulation with good flowability.
SR820	Sucrose-Glycerine	440-460	8000-10000	Sucrose/glycerine based polyol with molecular weight of 820 g/mol. Me dium viscosity and high functionality makes it a good choice for continu ous and discontinuous PUR formulation with good flowability.
SR620	Sucrose-Glycerine-DEG	363-393	3000-4200	Sucrose/Glycerine/DEG based polyol with molecular weight of 620 g/mol. High functionality coupled with medium viscosity imparts ability to optimize the mechanical properties without increasing foam friability tendency.
SR530	Sucrose-Sorbitol	465-515	7400-9200	Sucrose/Sorbitol based polyol with molecular weight of 530 g/mol. High functionality to increase compressive strength, stiffness, green strength and dimensional stability. A good choice for high density, pour-in-place and wood imitation with good surface finish.
SS480	Sucrose-Sorbitol	475-505	5000-7000	Sucrose/Sorbitol based polyol with molecular weight of 480 g/mol. High functionality to increase compressive strength, stiffness, green strength and dimensional stability. A good choice for high density, pour-in-place and wood imitation with good surface finish.

POLYETHER POLYOL for CASE Applications

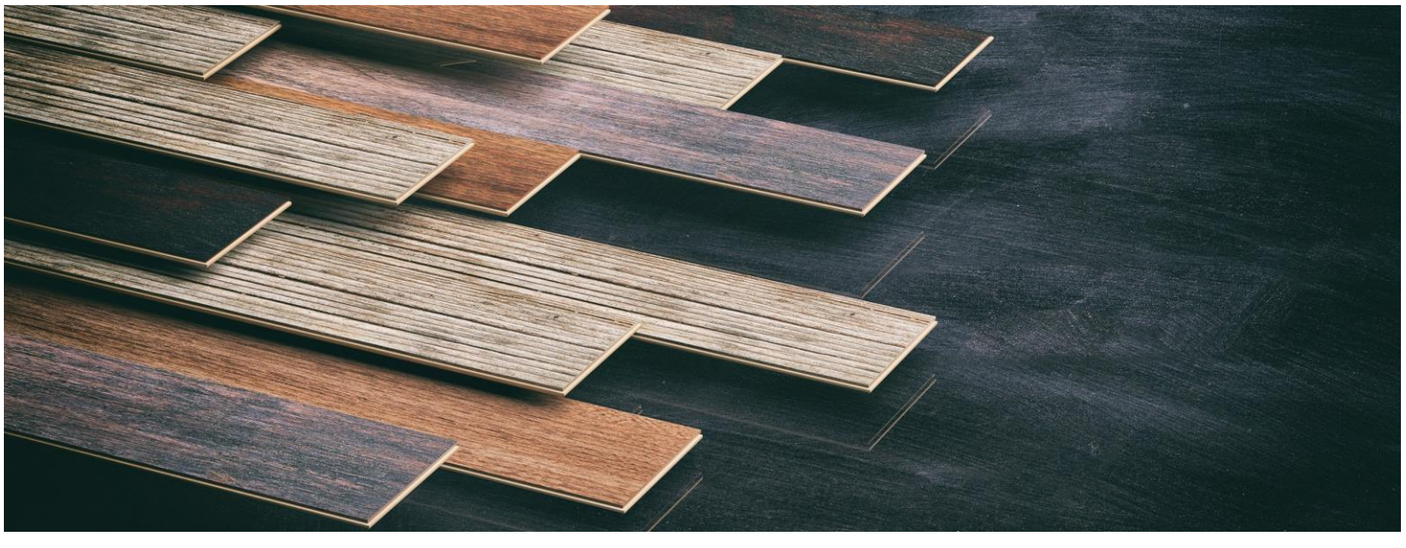
Our wide range of polyols for Coatings, Adhesives, Sealants and Elastomers (C.A.S.E) is continually being extended to meet specific customer requirements and includes diols, triols and prepolymers.

SyncoPol®	Initiator	Hydroxyl Number	Viscosity 25ºC (cps)	Benefits & Applications
DL400	Diol	265-295	50-80	High purity polyoxypropylene glycol of molecular weight 450 g/mol.
DL1000	Diol	107-117	120-180	High purity polyoxypropylene glycol of molecular weight 1000 g/mol. Designed as an intermediate for the production of polyure thane elastomers, coatings, adhesives and speciality foams.
DL2000	Diol	54-58	290-340	High purity polyoxypropylene glycol of molecular weight 2000 g/mol. Designed as both an intermediate for production of polyurethane elastomers, coatings, adhesives and as well prepolymers and OCF foams.
GT450	Glycerine	360-390	300-400	High purity polyoxypropylene triol of molecular weight 560 g/mol. Designed as an intermediate for the production of polyurethane elastomers, coatings, adhesives, 1K and 2K adhesive.
GT255	Glycerine	645-675	850-1050	High purity polyoxypropylene triol of molecular weight 255 g/mol. Designed as an intermediate for the production of polyurethane elastomers, coatings, adhesives, 1K and 2K adhesive.
GT1050	Glycerine	155-165	200-600	High purity polyoxypropylene triol of molecular weight ca 1000 g/mol. Designed as an intermediate for the production of polyurethane elastomers, coatings, OCF 1K foam, 1K and 2K adhesive.
GT690	Glycerine	240-250	200-300	Glycerine based polyoxpropylene triol, with molecular weight ca 690 g/mol. Designed as an intermediate for the production of polyurethane elastomers, coatings, OCF 1K foam, 1K and 2K adhesive.

POLYESTER POLYOL for Rigid Applications

SyncoPol® polyester polyols with a variety of structures, functionalities, hydroxyl values and molecular weights, are designed for use in many polyurethane applications, including C.A.S.E. (Coatings, Adhesives, Sealants, Elastomers), Flexible and Rigid Foam. This comprehensive line allows flexibility in achieving the wide ranges of chemical, physical and flammability properties required of polyurethane foams.

SyncoPol®	Initiator	Hydroxyl Number	Viscosity 60ºC (cps)	Benefits & Applications
EA470	Glycol-triol phthalate ester	230-270	2700-5000	Imparts superior fire retardancy and low smoke generation properties. It also enhances chemical resistance and adhesion properties. High reaction gives fast setting point thus shortened demould time whilst achieving fine cell foam and good insulation. Suitable for sandwich panel, spray foam, laminates block foam and PIR.
EA320	Glycol phthalate ester	325-375	90-160	Low viscosity promotes good flowability. Imparts superior fire retardancy and low smoke generation properties. It also enhances chemical resistance and adhesion properties. High reaction gives fast setting point thus shortened demould time whilst achieving fine cell foam and good insulation. Suitable for sandwich panel, spray foam, laminates block foam and PIR.
EA360	Glycol phthalate ester	300-330	2000-3000 (25)	Low viscosity promotes good flowability. Imparts superior fire retardancy and low smoke generation properties. It also enhances chemical resistance and adhesion properties. High reaction gives fast setting point thus shortened demould time whilst achieving give fine cell foam and good insulation. Suitable for sandwich panel, spray foam, laminates block foam and PIR.
EA300	Multi-functional phthalate ester	380-420	140-220	Low viscosity promotes good flowability. Impart superior fire retardancy and low smoke generation properties. It also enhances chemical resistance and adhesion properties. High reaction gives fast setting point thus shortened demould time whilst achieving fine cell foam and good insulation. Suitable for sandwich panel, spray foam, laminates block foam and PIR.



POLYESTER POLYOL for Flexible Foam & CASE Applications

SyncoPol®	Initiator	Hydroxyl Number	Viscosity 60ºC (cps)	Benefits & Applications
EL2002	Glycol adipate ester	54-58	1100-1250	Good balnace of mechanical and flexibility behavior to impart optimum elongation, toughess and adhesive properties. solvent and oxidation resistance. Suitable for thermoplastic PUs, adhesives, elastomers, footwear especially microcellular high quality shoesoles.
EL2001	Glycol adipate ester	54-59	900-1000	Good balnace of mechanical and flexibility behavior to impart optimum elongation toughess and adhesive properties. solvent and oxidation resistance. Suitable for thermoplastic PUs , adhesives, elastomers, footwear especially microcellular high quality shoesoles.
EL1320	Glycol adipate ester	81-91	500-900	Good balnace of mechanical and flexibility behavior to impart optimum elongation toughess and adhesive properties. solvent and oxidation resistance. Suitable for thermoplastic PUs , adhesives, elastomers, footwear.
EL970	Glycol adipate-phthal-ate ester	90-120	350-470	Good balnace of mechanical and flexibility behavior to impart optimum elongation toughess and adhesive properties. solvent and oxidation resistance. Suitable for thermoplastic PUs , adhesives, elastomers, footwear.
EB590	Glycol-triol adipate ester	190-210	300-500	Improve resistance to the abrasion, solvent, oxidation, weatherability and hydrolytic. Excellent tensile, tear strength and overall hardness. Suitable for elastomer and prepolymer for microcellular shoesoles.
EB2000	Glycol-triol adipate ester	54-60	1500-1800	Improve resistance to the abrasion, solvent, oxidation and weatherability. Excellent tensile and tear strength. Suitable for elastomer and prepolymer for microcellular shoesoles.
EB2201	Glycol-triol adipate ester	57-61	2200-2700	Improve resistance to the abrasion, solvent, oxidation and weatherability. Excellent tensile and tear strength while maintain flexibility. Suitable for elastomer and prepolymer for microcellular shoe soles and soft coating.
EB2202	Glycol-triol adipate ester	53-57	20000-25000 (25)	Improve resistance to the abrasion, solvent, oxidation and weatherability. Excellent tensile and tear strength. Suitable for elastomer and prepolymer for microcellular shoesoles.
EB2203	Glycol-triol adipate ester	53-57	20000-25000 (25)	Improve resistance to the abrasion, solvent, oxidation and weatherability. Excellent tensile and tear strength. General purpose for flexible foam and elastomer.
EB2204	Glycol-triol adipate ester	50-54	21000-26000 (25)	Improve resistance to the abrasion, solvent, oxidation and weatherability. Excellent tensile and tear strength while maintain flexibility. General purpose for flexible foam, elastomer and soft coating.
EB2500	Glycol-triol adipate ester	43-48	1600-1850	Improve resistance to the abrasion, solvent, oxidation and weatherability. Excellent tensile and tear strength while maintain flexibility. General purpose for flexible foam, elastomer and soft coating.

MARKETING EXPERTISE & TECHNICAL SERVICE

Our in-depth expertise in PU chemistry combined with extensive knowledgeof global market enable us to work proactively with customers and co-suppliers to develop customized solution to meet the dynamic foam market demand.

IRPC POLYOL



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