

Polychem Systems

Polyurethane Professional

For almost 45 years, we have been providing comprehensive solutions in polyurethane processing.

As an experienced Polish manufacturer, we combine tradition with innovation, and support to our industry and individual customers. Our knowledge, experience, flexibility, as well as our own R&D and laboratory are our main strengths and allow us to create products tailored to market needs.

We work in accordance with the requirements of ISO 9001 and ISO 14001 standards. As the quality of our products is our priority, we have obtained the appropriate approvals and certificates from both Polish and international testing bodies. Our products are a guarantee of quality and understanding of your individual needs.



POLYURETHANE FOAM SYSTEMS

Spray foam systems



PUREX NG – OPEN-CELL FOAM

This semi-rigid polyurethane foam has low specific weight, good insulating properties and resistance to fungi and mould. It provides a tight insulation layer, while helping to eliminate thermal bridges. It is mainly used as thermal and acoustic insulation for walls and attics.



PUREX NG – CLOSED-CELL FOAM

Rigid polyurethane foam to be used as internal and external insulation. It's designed for insulating roofs, walls, foundations, swimming pools, cold stores, warehouses and ships. This foam is an excellent combination of specific weight and mechanical properties. It is resistant to fungi and mould.



PUREX NG L – CLOSED-CELL FOAM

This two-component rigid polyurethane foam is applied exclusively by spraying. It is characterised by high density and rigidity, as well as good adhesion to the substrate. This type of foam is designed for reinforcing ABS and PMMA products.

Pouring foam systems



PUREX WG – POURING SYSTEMS

Our pouring systems for the production of rigid and semi-rigid polyurethane foam can be processed manually or using specialised equipment. Pouring systems are your choice for thermal insulation in buildings, industrial insulation components and for the production of moulded fittings. They are available in a wide range of densities.

Portable PUR foam spraying kit



PUREX BOX - DIY SPRAY KIT

Purex Box is a unique, portable two-component polyurethane foam spray kit for quick and professional application without the need for specialised equipment. It's your go-to solution for thermal and acoustic insulation of all types of building partitions.

Purex Gun spray gun and Purex Box toolkit are required for proper processing.

Insulation made to measure



TECHNICAL INSULATION

This type of foam is available in the form of PU blocks, lagging, fittings and boards with a density of 33–200 kg/m³. It is used for thermal insulation of doors and window profiles, insulation of cisterns, tanks, heat exchangers, and for the production of fittings and sleeves. It can be cut according to the customer's individual design.

COATING SYSTEMS

PUREX AM - POLYUREA SYSTEMS

These are aromatic, two-component polyurea systems that form seamless, fast-curing, waterproof coatings. Purex AM systems are applied by spraying with the use of a spraying unit and form a durable protective layer with good mechanical properties.

PUREX ASP - POLYUREA SYSTEMS

These aliphatic polyurea systems for manual application form hard coatings with high UV resistance and colour durability (RAL). They can be used as a protective layer for Purex AM and HB systems or as a standalone coating. They are the perfect choice for both professional and individual use and manual application.

PUREX HB-RN - HYBRID SYSTEMS

These aromatic hybrid systems combine the properties of polyurea and polyurethane. Applied by spraying, they provide effective waterproofing protection. Our hybrid systems have good mechanical resistance, crack bridging and durability at temperatures of up to 120°C. They protect concrete and other surfaces that may be exposed to damage.

PUREX PR - PU COATING SYSTEMS

Purex PR are two-component, solvent-free systems based on aromatic polyurethane. They form hard protective coatings. Purex PR systems are applied using machines with a mixing ratio of 3:1 or 1:1. These systems are used to protect steel surfaces, especially where durability and resistance to external factors are required. This product is dedicated for industrial buildings, tanks and steel elements.

PUREX PR SL - PU COATING SYSTEMS

This is a two-component, solvent-free system for manual application for coatings on small surfaces. These systems are designed to protect steel and metal surfaces such as tanks, shelters and steel elements.



Primers

PUR PRIMER C

A two-component, low-viscosity polyurethane primer designed for concrete, mineral, PUR foam, roofing felt and wood surfaces. PUR Primer C facilitates the application of polyurea systems by limiting moisture penetration and strengthening the substrate. It can be used as a bonding layer. Best applied with a roller or brush.

PRIMER ZN-N

A two-component epoxy primer of choice if you need to improve the adhesion of polyurea coatings to steel, galvanised and aluminium surfaces, while providing additional anti-corrosion protection. Best applied with a roller or brush.

1C POLYURETHANE ADHESIVES



DEKO – ADHESIVE FOR ROOFING APPLICATIONS

Our one-component, solvent-free DEKO adhesive is cured by moisture from the air or from bonded materials. It was designed for fixing insulation materials during roof renovation and thermal efficiency improvement.



DEKO ZN - ADHESIVES FOR GALVANISED SHEET METAL

One-component polyurethane adhesives with high adhesion to galvanised sheets that are designed for bonding with insulation materials such as polystyrene, mineral wool, PUR foam or cellular cardboard. Intended for use in the production of multi-layer elements and panels.



ECO - ADHESIVES FOR INSULATION MATERIALS

ECO are adhesives designed for bonding polystyrene, XPS, PUR foam, mineral wool and various types of cladding: sheet metal, roofing felt, laminates, plasterboard and wood-based panels. They ensure durable and flexible bonds of the insulation elements.



EKO S - ADHESIVES FOR RUBBER GRANULES

EKO S are your go-to one-component, solvent-free polyurethane adhesives for bonding SBR and EPDM granules. Used both in cold and hot production of finished elements (e.g. slabs, paving stones, kerbs, speed bumps, bases for road signs), they differ in terms of reaction time and flexibility of the joint.



EKO SN - ADHESIVES FOR SPORTS SURFACES AND PLAYGROUNDS

This polyurethane adhesive for SBR and EPDM was designed for seamless surfaces on multi-purpose sports fields, running tracks, tennis courts and safe synthetic surfaces on playgrounds. It is characterised by high durability and excellent mechanical parameters. It ensures durability, flexibility and effective shock absorption.



DEKO TZ - ADHESIVE FOR ARTIFICIAL GRASS

DEKO TZ is an adhesive for joining artificial grass mats. Once hardened, it forms a flexible joint that is resistant to changing weather conditions, ensuring joint durability and ease of use.



DEKO D4 - WOOD ADHESIVES

One-component, solvent-free DEKO D4 polyurethane adhesives are cured by moisture from the air or the bonded materials. They have a D4 water resistance rating. DEKO D4 are available in various viscosities and time versions.



DEKO ZM – ADHESIVES FOR SPONGES AND KITCHEN SCRUBBERS

Adhesives designed for bonding flexible polyurethane foam, cellulose and non-woven fabric in the production of bath sponges, kitchen scourers and mattresses. They create an exceptionally soft, flexible bond that is practically imperceptible to the touch. These are low-odour adhesives with the option of dyeing.

DEKO PVC – ADHESIVES FOR PVC CLADDING



Your go-to adhesives for bonding PVC panels with XPS, EPS and PUR foam. They form a strong, flexible bond that retains its properties even at sub-zero temperatures. These adhesives are used in the production of sandwich panels.



EKO R - ADHESIVES FOR REBOND FOAM

Adhesives used in the recycling of flexible polyurethane foam. They enable the formation of blocks from pieces of foam. EKO R adhesives are used in furniture manufacturing, construction, sports and the packaging industry.

2C POLYURETHANE ADHESIVES

DIPUR 100 - ADHESIVES FOR SANDWICH PANELS



Designed for the production of sandwich panels on continuous lines, these polyurethane adhesives have low combustion heat. A wide range of products allows for the given adhesive to be suited to the parameters of the production line and the method of dosing.



DIPUR 500 - ADHESIVES FOR SANDWICH PANELS

This is our solid polyurethane adhesives for manual and machine bonding of polystyrene, XPS, PUR/PIR, plywood, PET, plastics and sheet metal. DIPUR 500 are available in various time versions and in the form of a paste with high thixotropy.



DIPUR F - ADHESIVES FOR FILTERS

Our polyurethane adhesives intended for the production of automotive, HEPA and industrial filters combine low sensitivity to moisture, excellent adhesion to various filter materials and resistance to industrial oils.



DIPUR 2C.4 - ADHESIVE FOR ALUMINIUM JOINERY

This two-component polyurethane adhesive for joining corners in aluminium joinery in the manufacture of windows and doors is available in beige and anthracite colours, and in various time versions.



DIPUR 522 - ASSEMBLY ADHESIVE

This adhesive is designed for manual bonding of polystyrene, mineral and glass wool, PUR foam, cardboard with sheet metal, roofing felt, concrete slabs, wood and other materials. Its high thixotropy allows for vertical bonding.



DIPUR TZ - ADHESIVE FOR ARTIFICIAL GRASS

This two-component polyurethane adhesive is designed for joining artificial grass mats on textile tape. Suitable for outdoor and indoor use. Once cured, it forms a flexible, durable bond that is resistant to changing weather conditions.

FLEXIBLE SYSTEMS

PUREX EPI T - INTEGRAL FOAM SYSTEMS

These are polyurethane systems for the production of flexible moulded fittings. They are distinguished by good flow in moulds, aesthetic surface structure of the fitting, as well as a solid outer coating (skin) and a resistant inner core (porous). Designed for use in the automotive, furniture, railway and other industries.

PUREX EPI LE - ELASTOMER SYSTEMS

Elastomer systems designed for cold-cast moulding of solid elements with high mechanical requirements, e.g. bumpers, trusses or slats. They are characterised by a rubber-like appearance, with a wide range of hardnesses and applications. This is a group of materials with good mechanical properties. These systems are the perfect choice for the machine, construction, insulation, soundproofing and transport industries.

PUREX OE - FOOTWEAR SYSTEMS

Polyurethane materials with high elasticity, resilience, mechanical strength and a wide range of densities and hardnesses.

PUREX EPI F - FILTER SYSTEMS

Our systems dedicated to the filtration industry – air filters and industrial applications - are characterised by a uniform, flexible structure and very good mechanical properties. They can be coloured as required by the customer.

PUREX EPI S – SYSTEMS FOR SEAT FOAM

Polyurethane systems for the production of foam mouldings with densities of 50–120 kg/m³. These are HR (High Resilience) foams in versions for machine and manual application. They are characterised by high comfort of use, durability and resilience. They are intended for the automotive, furniture, railway, mining and sports industries.

PUREX EPI UL - GASKET SYSTEMS

Purex EPI UL are polyurethane systems for FIPFG – forming PU gaskets directly onto parts. They are also available in a thixotropic version. Their main characteristics include low permanent deformation, hydrolysis resistance and a wide range of thermal resistances.



Ready-made products - Foam pistons



FOAM PISTONS

Foam pistons are designed for cleaning and drying pipelines. Thanks to their resistance to abrasion and tearing, as well as high absorbency, they perform very well at segmented bends. Available in various densities and sizes.

FITTING FOAMS AND ADHESIVES

PROFI - FITTING FOAMS

Our signature one-component polyurethane foams, curing under the influence of moisture are available in gun and hose versions. They are designed for both professional and consumer applications in the installation of windows and doors. They provide thermal and acoustic insulation.

PUREX SPRAY - INSULATION

Polyurethane foam designed for thermal insulation. It's perfect for internal insulation in both new and old buildings. Purex Spray comes with a special spray nozzle for effective application in hard-to-reach areas.

STYRPUR FAST - ADHESIVE

This is a specialised adhesive for fixing polystyrene boards in thermal insulation systems. It can be used for installing window sills, filling up insulation, as well as for DIY projects and fixing decorative elements to concrete, wood, metal, EPS, XPS and OSB. The adhesive is available in various colours.

STYRPUR - ADHESIVE

This all-purpose fitting adhesive is used mainly for fixing polystyrene boards in thermal insulation systems.

PURSAN AE500 - FOAM REMOVER

Pursan AE500 is our all-purpose aerosol preparation for removing fresh, uncured foam and polyurethane adhesives. It's indispensable for cleaning guns and application tools, as well as for degreasing surfaces before applying foams, silicones and adhesives.



SEALING AND ADHESIVE COMPOUNDS



FLEXPUR 50 PREMIUM

Our signature one-component, polyurethane, flexible sealing and bonding compound. It was designed for construction and industrial applications – both indoors and outdoors. It's your go to compound for vertical and horizontal expansion joints, roofing seals and bonding metal structures. The compound can be painted and is resistant to vibrations and stresses.

Primers



PUR PRIMER M

PUR PRIMER M is a one-component polyurethane resin for priming the edges of expansion joints in concrete before applying FLEXPUR 50 PREMIUM compound. It is designed in particular for dry, mature substrates with low moisture content to improve adhesion and durability of the seal.

EPOXY FLOORING SYSTEMS

PUREX EPO 010 - RENOVATION MORTAR

This two-component, solvent-free epoxy mortar for repairs and renovations cures without shrinkage, ensuring a durable fill. Thanks to its high adhesion to the substrate, it is ideal for renovation and repair work.

PUREX EPO 110 - PRIMER

This is our resin-based primer to be used on concrete surfaces subject to mechanical and chemical stress. It maintains very low viscosity even at low temperatures. The primer provides corrosion protection for the concrete reinforcement.

PUREX EPO 210 - SELF-LEVELLING COATING

PUREX EPO 210 is a self-levelling epoxy coating for priming and levelling porous, uneven concrete substrates and cement screeds. It can serve as both a primer and a levelling compound. Resistant to abrasion, mechanical and chemical loads, it provides excellent adhesion to the substrate. Good levelling properties are its key feature.

PUREX EPO 220 - THIN-LAYER COATING

This thin-layer epoxy coating was developed with sealing and protecting concrete substrates and cement screeds in mind. Applied onto Purex EPO 110 primer, it creates a durable, abrasion-resistant finish. It is characterised by excellent adhesion to the substrate.



CONTACT US

Polychem Systems Sp. z o. o. ul. Wołczyńska 43, 60-003 Poznań

🌐 www.polychem-systems.com.pl

☎ +48 61 867 60 51

@ info@polychem-systems.com.pl