

PLIXXENT.

POLYPLAY®

**HIGH PERFORMANCE
FLOOR SURFACES**



THIS IS PLIXXENT.

EUROPE'S LEADING INDEPENDENT POLYURETHANE (PU) SYSTEM HOUSE

Polyurethane – We love it and we live it!

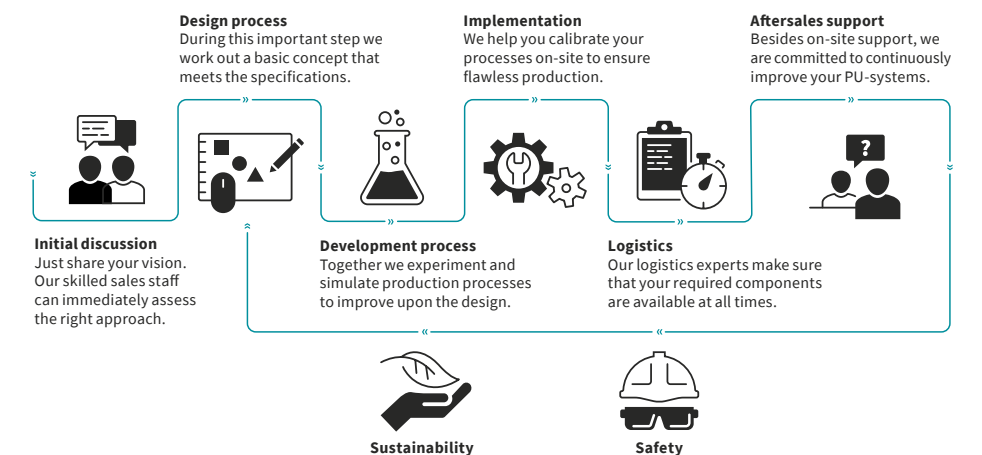
Each and every day, we are inspired by the great versatility of polyurethanes. We develop and improve innovative PU formulations for our customers with passion and dedication. What fascinates us most is helping our customers to simplify processes and make their products even more successful. Our expertise in the development and processing of polyurethanes, independent raw material procurement and a European team with decades of experience make us an excellent partner.



PLIXXENT is your partner for innovative PU solutions

As a flexible company, PLIXXENT develops polyurethane systems that meet your needs. With the purchase of PURE-FLEX® in 2021 we added 50 years of experience in developing and producing polyurethane adhesives to our portfolio to offer producers of flexible packaging worldwide high quality solutions for their needs.

We believe in working with clients, instead of just for them.



Partner on equal footing:

The development of customized polyurethane systems is a complex matter. We support our customers throughout the development process with individual technical and commercial service.

On-site service:

We support our customers in their local language and offer them on-site technical service. In addition, we train users in PU processing and the safe handling of PU raw materials.

Reliable and flexible production:

Whether for packaged or bulk delivery – our production flexibly adapts to customer needs. We deliver the required quantities quickly, reliably and on time.

In-house development department:

Our development department specialises in innovative and sustainable PU systems for new applications and markets.

In-house technical center:

We know our customers' processes – thanks to our technical center. There, we recreate common PU processing methods for optimum customer service.

In-house test laboratory:

Precise knowledge of material behavior is indispensable for component calculation and development. In our test laboratory, we therefore determine the most important characteristic values of PU systems for our customers.

**PLIXXENT IS YOUR PARTNER
FOR JOINT SUCCESS!**



POLYPLAY® **SAFETY PLAY** **SURFACES** **BUILT** **TO INSPIRE**

All the colours of the rainbow are now available in the **POLYPLAY®** system, allowing for design freedom and total peace of mind through the highest standards of manufacture

We ensure the excellent quality and consistency of our products by sourcing our EPDM granules from only one trusted and approved manufacturer. Combined with our in-house PU binder, this creates a first-class safety surface for playgrounds.

Benefits of the **POLYPLAY®** system include:

- Shock absorbency
- Slip resistance
- Uniform and seamless
- Exceeds required standard for falls from height
- Minimise injury risk
- Creative design freedom
- Expert installation guidance





Eggshell* RAL 1015



Beige RAL 1011



Tierra RAL N/A



Fuego RAL N/A



Bright Yellow RAL 1021



Earth Yellow RAL 1032



Orange RAL 2009



Bright Red RAL 3020



Red RAL 3016



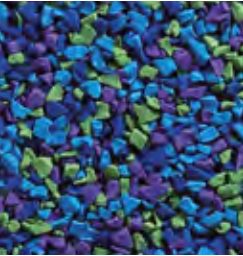
Red (0.5-1.5) RAL 3016



Brown RAL 8002



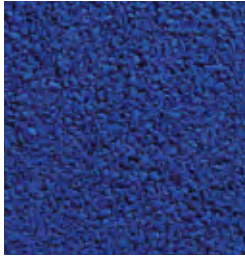
Pink RAL 4010



Agua RAL N/A



Purple RAL 4005



Blue (0.5-1.5) RAL 5002



Standard Blue RAL 5002



Light Blue* RAL 5015



Teal RAL 5020



Light Grey* RAL 7047



Green (0.5-1.5) RAL 6016



Standard Green RAL 6016



Light Green* RAL 6017



Mid Grey RAL 7043



Black RAL 9005

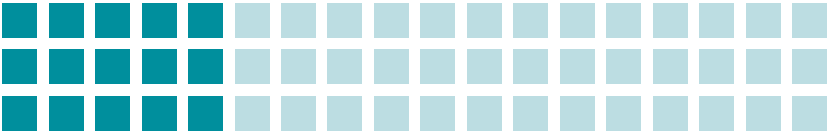
* recommend using with Poly Aliphatic binder

COLOURS
AND SHAPES
TO STIMULATE
YOUNG MINDS

POLYPLAY® systems offer architects consultants and designers unlimited solutions to create safe and cost-effective playground surfaces

A variety of colours, shapes and images on the playing surface is proven to stimulate young minds. There is added peace of mind in the knowledge that the surface is safe and the severity of any impact or potential injury is significantly reduced.

Any image, pattern or design can be created; there really are no limitations as to what can be achieved. Your imagination is the only barrier to what can be created by a skilled installation team.



PLIXXENT.



EXCEEDING THE CRITICAL FALL HEIGHT STANDARD

POLYPLAY® safety play systems provide a high quality platform for all recreation and play applications

Polytech Liquid Polymers is an ISO 9001:2015 company so you have the assurance that all products have been produced to the highest standards.

All surfaces should be installed to the relevant BSEN Safety Standards. Surfaces can be installed from 25 mm to 110 mm thickness dependant on usage and equipment on site.



CRITICAL FALL HEIGHTS

As part of its commitment to excellence, Polytech Liquid Polymers commissioned a LABOSPORT test to determine the Critical Fall Height HIC values of the range of play-ground safety surface systems.

Polytech Liquid Polymers LABOSPORT test results

CONCRETE BSEN1177	RESULTS
40mm sample	CFH obtained of 1.30m
50mm sample	CFH obtained of 1.50m
60mm sample	CFH obtained of 1.70m
70mm sample	CFH obtained of 2.10m
90mm sample	CFH obtained of 2.40m
110mm sample	CFH obtained of 2.70m
130mm sample	CFH obtained of 3.00m

To view the full LABOSPORT results and Polytech Liquid Polymers data sheet please contact the Polytech Liquid Polymers technical team on **+44 1625 575737** or visit **www.plixxent.com**

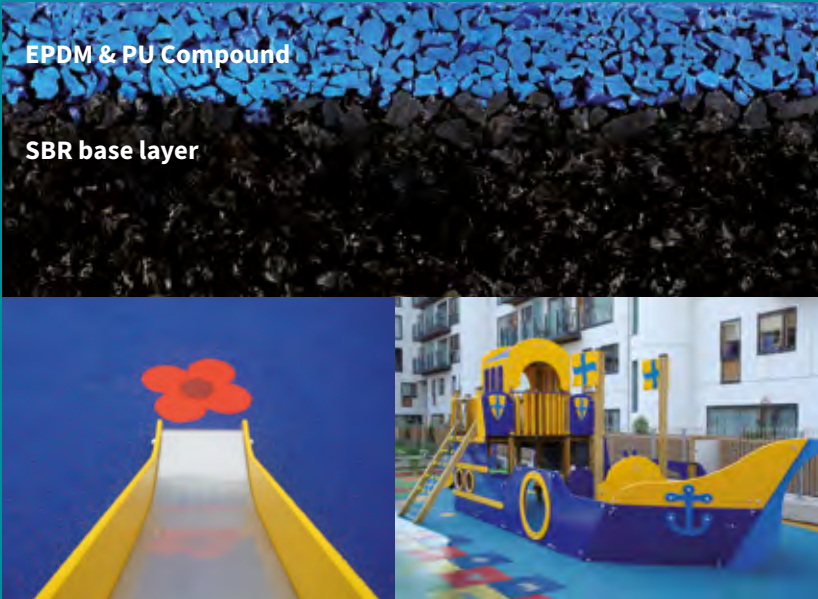
ABOUT POLYPLAY® SAFETY SURFACE SYSTEMS

As well as providing colourful and stimulating play areas, POLYPLAY safety surfaces are designed for challenging environments including wet applications where colour stability and grip are important factors, such as water parks and play pool surfaces and surrounds.

Designed for:

- Shock absorbency
- Optimum force reduction
- Slip resistance
- Uniform and seamless
- Exceeds required standard for falls from height
- Minimise injury risk
- Creative design freedom

Typical safety surface construction





POLYPLAY® INSTALLATION GUIDE WET POUR SYSTEM

Preparation is the key to any successful installation. The ground is prepared and levelled prior to laying the initial base surface. SBR layer depth to be determined by the critical fall height required to be achieved, followed by a 15mm coloured EPDM layer.

Base layers typically contain 8% to 10% binder by weight of finished bound product and the topping 18% to 22%. Care must be taken to prepare the substrate and ensure clean, dry working conditions.

Storage

Binder
Dry conditions
> 3°C to < 35°C
Shelf life of 6 months for sealed containers
(Avoid storing part used containers)

Granules
Dry conditions

Packaging

Binder
Supplied in 1090 kg IBCs, 220 kg drums or 25 kg plastic kegs.

Granules
Supplied in 25 kg plastic bags and palletised.

Technical Performance

TECHNICAL PROPERTY	SPECIFICATION
Surface thickness	8 mm to 110 mm
Surface design	Trowel or machine finish
Hardness	65 to 70 shore A
Permeability	Porous
Abrasion	RV32 (DIN 18032/6)
Dimensional stability	98%
Tensile strength	>1.2 N/mm ²
Elongation at break	> 120%
Effect of lit cigarette	Non combustible
Ball rebound	98%
Slip resistance	Dry - 86 (BS7188:1988) Wet - 45 (BS7188:1988)
Type of surface	Jointless – cast in situ
NCO Content	Binder 8.0% to 9.5%
Specific Gravity	EPDM 1.50 to 1.60 Binder 1.07 @ 200°C
Viscosity - POLY46	2200 - 3600 mPa @ 250°C
Viscosity - POLY811	3200 - 4600 mPa @ 250°C

These UV values are for the EPDM without binder, measured on a standard grey scale after 1000 hrs exposure. This is equivalent to 3 to 7 years normal weathering. A reading of 5 is no change.

UV Resistance

COLOUR	1000hrs Grey Scale
Red	4–5
Earth Yellow	4
Eggshell	4
Beige	4
Light Grey	4
Green	3–4
Blue	3–4
Light Blue	3–4
Orange	3–4
Light Green	3
Purple	3
Bright Yellow	3



Maintenance of play surfaces

Routine maintenance will ensure that the playing surface is kept clean and delivers consistent performance.

Essential preventative steps

- Sweeping leaves and other detritus from the surface
- Brushing the surface to prevent any accumulation of an impervious skin on the surface that may impair drainage.
- Ensuring that only appropriate footwear is used on the surface, high heeled shoes, studs and spikes are not appropriate.
- Inspecting surface for signs of damage and arranging remedial repairs promptly

Keeping the Surface Clean

Leaves, flowers, pine needles and other detritus should not be allowed to remain on the surface for any length of time. These rapidly rot down forming a drainage-inhibiting 'skin' within the surface and providing a growing medium for algae moss and weeds.

Stain Removal

Most stains are easily removed with a solution of hot (not boiling) water and household

detergent, such as washing-up liquid. The removal of chewing gum is achieved using a freezing aerosol. Heavy oil marks are removed with a cloth and methylated spirits.

Weeds

No matter how much care is taken weeds may appear on the surface usually as a result of wind-blown seeds. Small numbers of weeds may be removed by hand without damaging the surface. Localised areas of self-set weeds can be treated with domestic weedkillers without causing damage to the surface. Oil based weedkillers must not be used.

Snow & Ice

Snow and ice are not harmful and can safely melt through. Brushes or rubber edged scrapers must be used to remove snow. Metal shovels and scrapers will damage the surface and must not be used; neither should chemically de-icing agents be used. If heavy rain falls immediately after a very cold spell, the surface may become icy for a few hours. Do not worry, the ice will soon melt and the surface will then drain normally. If heavy rain falls immediately after a very cold spell, the surface may become

icy for a few hours. Do not worry, the ice will soon melt and the surface will then drain normally.

Maintenance Schedule

Weekly

Clear leaves, rubbish, and debris from the surface; dealing with any new weeds, moss or algae. Inspect the whole surface for signs of damage, seek advice from the manufacturer as required.

Twice a Year

Check for moss and algae growth, food stains, shoe marks and clean as appropriate. Inspect the whole surface for signs of damage, seeking advice from the manufacturer as required.



MANUFACTURING INVESTMENT

POLYPLAY® systems are manufactured exclusively at our purpose built facilities to ISO 9001:2015 standards. We have our own testing and development facilities, which allow our customers to benefit from a programme of continuous improvement.



Cert No.1819
ISO 9001:2015
ISO 14001:2015
ISO45001:2018



To guarantee our polyurethane flexible flooring systems excel across a wide range of applications, we have developed 'state-of-the-art' manufacturing facilities to maintain product quality and integrity throughout the design, manufacturing and supply process.

And our unique 'single source supply' for EPDM granules and polyurethane binding agents, means that we can take responsibility for every stage of production and delivery, a total commitment to quality and traceability throughout.



For more information on POLYPLAY® systems and to request a free installation guide and technical specification data sheet please call:

+44 1625 575737

or visit www.plixxent.com

>> BIG IN EUROPE

📍 Headquarter

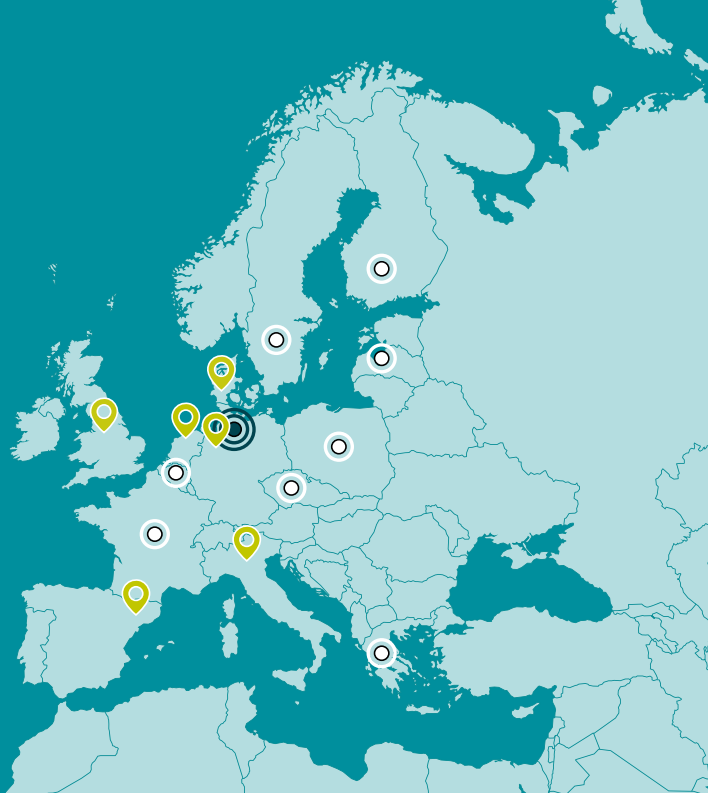
- Germany: Hamburg

📍 Systems houses

- Denmark: Otterup/Randers
- Germany: Oldenburg
- The Netherlands: Foxhol
- Spain: Tarragona
- Italy: Dalmine (warehouse and sales)
- Italy: Busto Arsizio
- Great Britain: Macclesfield, Cheshire

📍 Sales locations:

- Latvia
- Czech Republic
- Poland
- Finland
- Sweden
- Greece
- France/Belgium



PLIXXENT provides innovative technologies based on polyurethanes.

Specialising in standard as well as tailor-made systems, we accompany our customers throughout the entire value chain – from the initial consultation to the aftersales support.

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For more information on Polytech Liquid Polymers flexible flooring systems visit:

www.plixxent.com

or call **+44 1625575737** to talk to the experts.

PLIXXENT.