

PLIXXENT.

PURE-FLEX®

LAMINATING ADHESIVES FOR FLEXIBLE PACKAGING



PURE-FLEX® 

THIS IS PLIXXENT.

EUROPE'S LEADING INDEPENDENT POLYURETHANE (PU) SYSTEM HOUSE

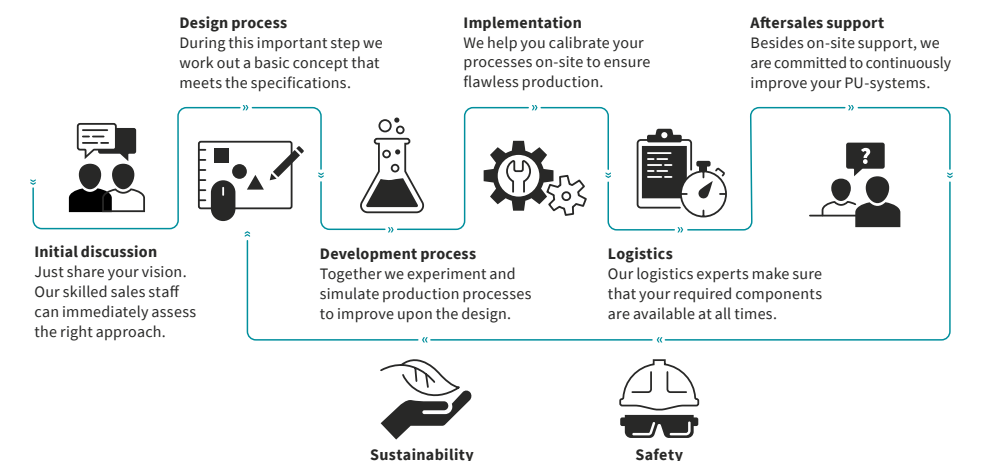
Polyurethane – We love it and we live it!

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.

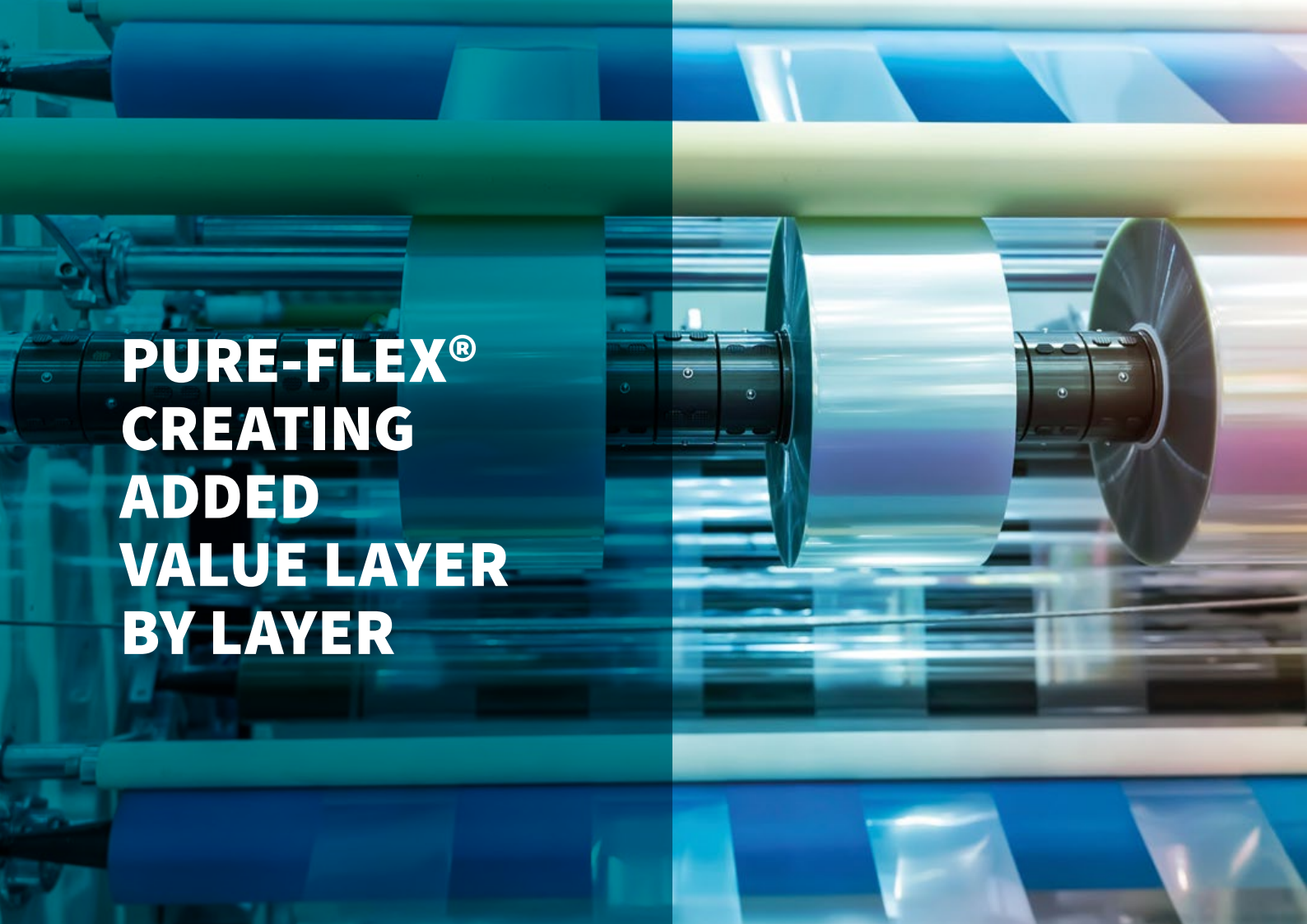
In-house technical center:

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!**



**PURE-FLEX®
CREATING
ADDED
VALUE LAYER
BY LAYER**



With PURE-FLEX® PLIXXENT offers tailor-made polyurethane adhesives specifically designed for the flexible packaging, converting, and graphic arts industry. Our polymer development and design techniques enable us to deliver products that meet the rapidly changing needs of the converting industry with safety, quality and environmental sustainability in mind.

**EFFECTIVE HIGH-QUALITY SOLUTIONS
FOR FLEXIBLE PACKAGING**

Polyurethane-based adhesives serve as a high-performance and effective binder for multilayer flexible packaging laminates. These laminates have barrier properties that extend the shelf life of both food and pharmaceutical products. Food stays fresh longer and hygiene products such as wet wipes retain their moisture. They also enable the cost-effective and rapid production of lightweight, durable packaging that provides consumers with convenient and easy-to-use solutions.

Durability and great design freedom for decorative, high-quality packaging are also among the benefits offered by polyurethane as an adhesive. This allows the material to show its advantages even when freshness is not a factor in the packaging application.

PURE-FLEX® packaging adhesives are available as solvent-free, solvent-based and water-based options for a variety of flexible packaging applications.

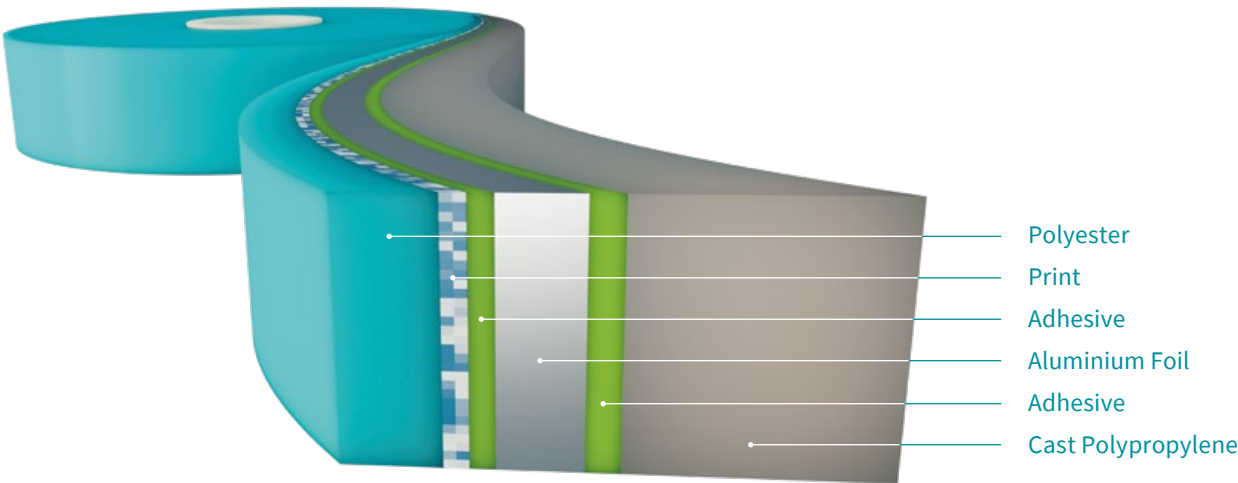
SYSTEMS TAILORED TO YOUR NEEDS

PURE-FLEX® Laminating Adhesives bring significant advantages to converters by enabling reduced machine downtime, greater yield, significantly faster line-speeds, reduced cleaning times, and longer on machine life thanks to consistently high product quality backed up by best-in-class technical support.

Flexible packaging plays a fundamental role in significantly **reducing food waste**, by extending shelf life and reducing the rate of spoilage during transport.

This not only has a positive impact on the cost of food for the consumer, but also has vast **benefits for the environment**, as less food has to be produced and therefore less transported.

With our solvent-free two-component systems for low application temperatures and our water-based system, we also offer our customers **highly energy-efficient solutions that are as sustainable as possible.**





SOLVENT FREE LAMINATING ADHESIVES



PURE-FLEX® 946 / C86 Typical Applications
Dry foods, snack packs, retort applications for film-to-film structures and paper laminations.

Our extensive range includes two-component and one component products that are suitable for a wide range of substrates. All systems allow high production speeds and easy cleaning and offer excellent wetting.

PURE-FLEX® 946 / C86 / C45

Are modular two component, general purpose, solvent free polyurethane laminating adhesive systems, that gives you the option of alternative curatives depending upon your requirements, thus helping to reduce inventory. The systems mixing ratio and application temperatures remain unchanged for both curatives.

Both systems are suitable for laminating transparent films, metallised films and aluminium foil, while the excellent chemical resistance of PURE-FLEX® 946 / C45 makes it ideal for wet wipe packaging.

The excellent wetting characteristics of both systems give good appearance on inks and metallised films, while film to film laminates offer good product resistance and are boilable / retortable.

PURE-FLEX® 946 / C86 / C45 are both European (EU) No. 10/2011 and FDA 21 CFR § 175.105 compliant.

KEY BENEFITS

- Modular system, reduces inventory
- Enables you to move from general purpose to highly chemical resistant laminates
- Low viscosity systems designed to run at high speed.
- Increases machine efficiency up to 90,000 meters per week additional production
- The rapid bond build up allows slitting after twenty four hours.
- Greater product stability leading to longer on-machine life
- Operator training and machine commissioning support available



PURE-FLEX® 946 / C45 Typical Applications
Wet wipe packs, dry foods, snack packs, retort applications for film-to-film structures and paper laminations.

PURE-FLEX® 925

Is a one component, solvent free polyurethane laminating adhesive suitable for laminating aluminium foil and metallised films to paper or paperboard. The high viscosity system is applied at 80°– 100°C.

PURE-FLEX® 925 is both European (EU) No. 10/2011 and FDA 21 CFR § 175.105 compliant.

KEY BENEFITS

- Excellent adhesion to aluminium foil and metallised films.
- Exhibits high initial bond strengths. Further processing / slitting can usually be carried out in twenty-four hours.
- As the system is solvent free it does not affect the dimensional stability of the paper / board.
- The systems high viscosity helps provide an exceptionally smooth surface for surface printing.



PURE-FLEX® 925 Typical Applications
Aluminium foil for decorative laminates, for high quality cosmetics and other packaging.

PURE-FLEX® 960

Is a one component, solvent free polyurethane laminating adhesive suitable for laminating film to film, and film to paper. The high viscosity system is applied at 90°– 100°C.

PURE-FLEX® 960 is both European (EU) No. 10/2011 and FDA 21 CFR § 175.105 compliant.

KEY BENEFITS

- Excellent adhesion to a wide range of films
- Exhibits good initial bond strengths
- As the system is solvent free it does not affect the dimensional stability of any paper that is laminated.



PURE-FLEX® 960 Typical Applications
Graphic Cards for dry foods, snack packs and paper laminations.



SOLVENT BASED LAMINATING ADHESIVES

Our extensive range includes products from general purpose to high performance. Our general-purpose system PURE-FLEX® 510 / C4 offers excellent bond strengths on a wide range of substrates, high machine speeds, combined with ease of handling and the ability to run at high application solids. PURE-FLEX® 300 / C30 is one of our high-performance systems that gives outstanding performance on aluminium foil.

PURE-FLEX® 510 / C4

Is a two component, solvent based, polyurethane laminating adhesive suitable for laminating transparent and metallised films. It can also be used on aluminium foil and is ideally suited for dry and non-aggressive packaging. The system exhibits good wetting and can be used with 50-micron polyethylene containing up to 600 ppm Erucamide. The rapid bond build-up allows slitting in as little as six hours.

PURE-FLEX® 510 / C4 is both European (EU) No. 10/2011 and FDA 21 CFR § 175.105 compliant.

KEY BENEFITS

- Very high initial bond strength, excellent solvent release and can be run in line
- Ideal for laminating transparent films, metallics films and aluminium foil
- Very versatile system that can be run at high solids and used on paper
- Can be run at high speeds due to its excellent solvent release characteristics



PURE-FLEX® 510 / C4 Typical Applications

Dry foods, snack packs, retort applications for film-to-film structures and paper laminations.

PURE-FLEX® 300 / C30

Is a two component, solvent based, polyurethane laminating adhesive for high performance applications requiring high process and chemical resistance, particularly on aluminium foil. The system has excellent on machine running characteristics, exhibits good wetting and can be used with 50-micron polyethylene containing up to 450 ppm Erucamide.

PURE-FLEX® 300 / C30 is both European (EU) No. 10/2011 and FDA 21 CFR § 175.105 compliant.

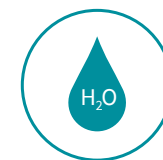
KEY BENEFITS

- Ideal for applications requiring hot filling, high process and chemical resistance
- Outstanding bond strength particularly to aluminium foil
- Excellent bond strength on a wide variety of materials, including polyester



PURE-FLEX® 300 / C30 Typical Applications

High performance applications requiring hot filling, packaging of aggressive chemicals and spices. Pharmaceuticals, medical, retort applications for film to film and film to aluminium foil structures.



WATER BASED LAMINATING ADHESIVES

PURE-FLEX® 800 / C80

Our 2-component water-based laminating adhesive system PURE-FLEX® 800 / C80 is highly versatile and suitable for both dry and wet packs. It contains no organic solvent, is free from epoxy, and free from primary aromatic amines. The system has outstanding on machine running characteristics, it is sheer stable, runs with almost zero foaming, and exhibits excellent wetting and clarity. It has good adhesion to a variety of films, including polyester and aluminium foil.

PURE-FLEX® 800 / C80 is both European (EU) No. 10/2011 and FDA 21 CFR § 175.105 compliant.

KEY BENEFITS

- It exhibits high initial bond strengths and is suitable for use on both conventional and digital inks.
- Laminates have excellent heat and chemical resistance.
- Transparent structures are boilable.
- Dilution and clean down can be carried out using water thus significantly reducing the amount of organic solvents being used when compared to a solvent based systems.
- Requires no primary aromatic amine testing of laminates.



PURE-FLEX® 800 / C80 Typical Applications

Snack packs, dry food, paper laminations and medical packaging.



THE PERFECT SYSTEM FOR EVERY APPLICATION



	MEDICAL	GENERAL PURPOSE	RETORT APPLICATIONS ON FILM TO FILM STRUCTURES	CHEMICAL RESISTANCE	HOT FILLING	DECORATIVE
 Solvent free	PURE-FLEX® 946 / C86 Two component laminating transparent films, metallised films and aluminium foil					
		PURE-FLEX® 946 / C45 Two component laminating transparent films, metallised films and aluminium foil				
						PURE-FLEX® 925 One Component laminating aluminium foil and metallised films to paper or paperboard 
						PURE-FLEX® 960 One Component laminating film to film, and film to paper 
 Solvent based		PURE-FLEX® 510 / C4 Two component laminating transparent and metallised films 				
	PURE-FLEX® 300 / C30 Two component laminating film to film and film to aluminium foil					
 Water based	PURE-FLEX® 800 / C80 Two component laminating a variety of films, including polyester and aluminium foil 					

>> BIG IN EUROPE

📍 Headquarters

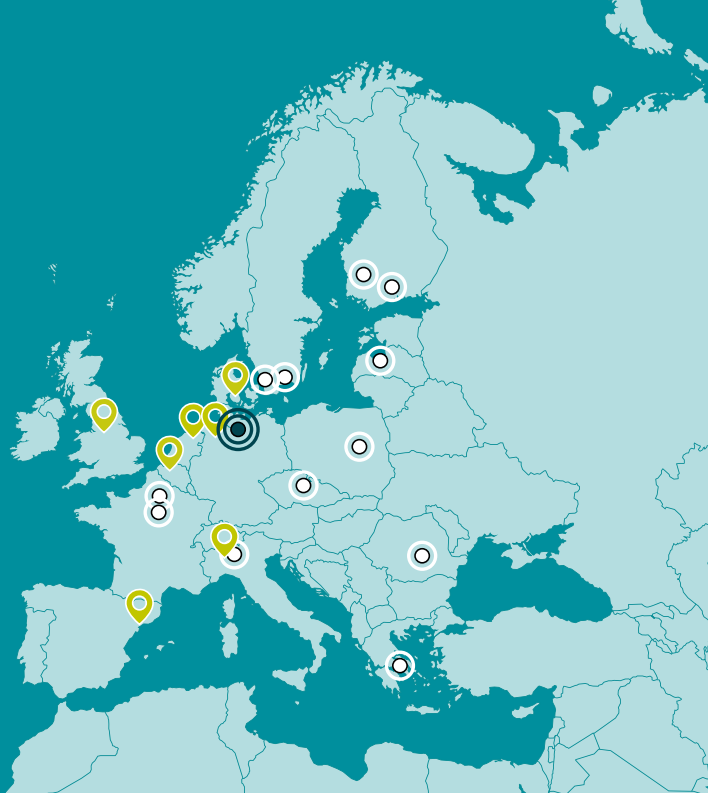
- Germany: Hamburg

📍 Systems houses

- Belgium: Gent
- Denmark: Randers
- Germany: Oldenburg
- Great Britain: Macclesfield, Cheshire
- Italy: Busto Arsizio
- Spain: Tarragona
- The Netherlands: Foxhol

📍 Sales locations:

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



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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