

EPAFLEX **POLYURETHANES**

Experienced. Flexible. Responsive.



Company Profile

www.epaflexpolyurethanes.com

Since 1991



It's a true pleasure for me to introduce you to Epaflex Polyurethanes and to our portfolio of products and services. Our company is continuously growing and evolving, thanks to the energy and the dedication of our people, who place our customers at the center of what we do every single day. As a chemical manufacturer, we are committed to bringing a meaningful contribution to create a more sustainable and inclusive future for each citizen of this world. Our business model stands on 4 pillars: people, profit, planet and ... polyurethane. Come and join our exciting ride !

Davide Brambillasca
CEO



1991

FOUNDATION

Epaflex started operations as a system house to supply polyurethane systems to footwear manufacturers. Strategically located very close to Vigevano, it had already a strong orientation to be close to customers, wherever they were all over the world

1998

FIRST TPU PRDUCTION

The first thermoplastic polyurethane (TPU) granules were produced on a self-designed and self-assembled reactive extrusion line. Epaflex supplied TPU to synthetic leather manufacturers and quickly started to differentiate its offer, by adding products for injection molding and solvent borne adhesives.

2008

ELACHEM ACQUIRES EPAFLEX

Elachem spa, established in Vigevano in 2001 and specialized in production of polyurethane systems, acquired Epaflex. With the acquisition it infused new energy and a new strategic direction into a solid and growth-oriented structure.

2009

FIRST CASE PRODUCTION

With the addition of the first products for CASE (Coating, Adhesives, Sealants and Elastomers) applications, the evolution of the company made another big step ahead. Epaflex started to be present in the construction market and to take advantage of the growth dynamics of polyurethane in this key segment.

2015

REVAMPING OF TPU LINES

The evolution of the market and the growth of the ambitions of Epaflex asked for a complete revamping of the reactive extrusion assets for TPU production. The journey to full plant automation, in order to deliver state-of-the-art products to ever more demanding customers, started.

2023

EPAFLEX AMERICAS

Epaflex Americas was founded to service USA and Canada with TPU pellets for automotive, general industrial, electronics, consumer goods, and heavy engineering applications.

The Company

EPAFLEX Polyurethanes® was founded in 1991 in Cassolnovo, Italy as a manufacturer and supplier of polyurethane systems to the footwear industry. Over the years, EPAFLEX has grown and expanded the product line to better address our customers' needs but adding production of thermoplastic polyurethane (TPU) and polyurethane products for use in coatings, adhesives, sealants, and elastomer (CASE) applications. Together with the parent company, ELACHEM® which is located in Vigevano, Italy, EPAFLEX is a vertically integrated industrial group with state-of-the-art manufacturing.

The upstream integration of polyester polyol coming from ELACHEM is a competitive advantage that enables a broader development envelope for TPU, control, and flexibility in the global polyurethane market. In 2023, Epaflex has furthered expanded their scope into the Americas by launching EPAFLEX Americas - a wholly owned subsidiary of Epaflex intended to service the North American market. EPAFLEX Americas will draw on a rich legacy of over 30 years of design and manufacturing expertise of thermoplastic polyurethane.



Our offer

Epaflex current offer of polyurethane products includes:



THERMOPLASTIC POLYURETHANES (TPU)



PU SYSTEMS FOR THE FOOTWEAR INDUSTRY



PU FOR CASE APPLICATIONS AND SPRAY FOAM



PU FOR CASTING APPLICATIONS

Epaflex proudly offers, on top of our branded products, contract manufacturing services that leverage the quality and the reliability of the industrial assets and the R&D facilities available in Italy. With more than 30 years' experience in polyurethane chemistry, we are the partner you are looking for when it comes to quality, reliability, discretion, flexibility, and speed.



THE GROUP



HEAD OFFICE
900 West University Drive
Suite C3 & C4 Rochester, Mi,
48307 - USA.



MANUFACTURING AND HEAD OFFICE
Corso Torino, 129, 27029
Vigevano PV, Italy



MANUFACTURING AND HEAD OFFICE
Via Circonvallazione Est, 8, 27023
Cassolnovo PV, Italy


Thermoplastic polyurethanes

EPAFLEX Thermoplastic polyurethane elastomers (TPU) efficiently bridge the performance gap between rubber and plastics in many demanding applications.


Our current TPU product portfolio includes:


EPA mould  designed for injection molding processes.

EPA line  designed for extrusion processes.

EPA met  bio-based high performance TPU for injection molding or extrusion processes

EPA lite  high performance rubberlike TPU based materials

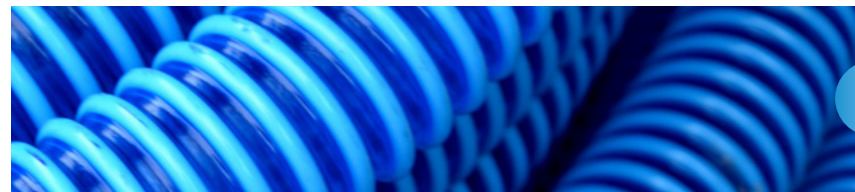
EPA col  designed for production of solvent borne adhesives

PA koflex  designed for production of vegan leather via coagulation process

Key features offered by Epaflex TPU

- ✓ Excellent abrasion and scratch resistance
- ✓ Very good resistance to oil and greases
- ✓ Outstanding batch to batch consistency
- ✓ Good flexibility even at low temperatures
- ✓ Easy recyclability

Key applications for EPAFLEX TPU



✓ Spiral hoses, thermoplastic hoses, and pneumatic tubes.



✓ Timing belts, profiles, and conveyor belts.



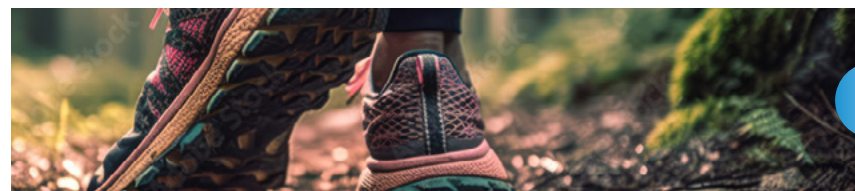
✓ Cables for worksites, for automation and for e-mobility.



✓ Demanding technical parts.



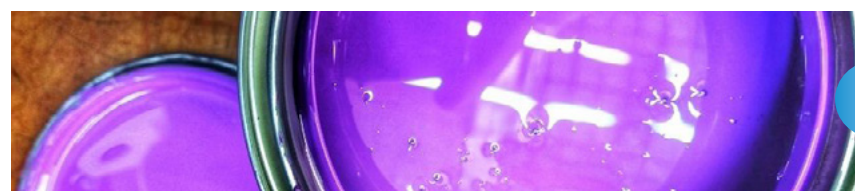
✓ Cast films for barrier and textile coating applications.



✓ High quality unit soles and heels top pieces.



✓ Vegan leather.



✓ Solvent borne adhesives.

TPU & PU Systems

for the footwear industry

TPU: High performance to exceed your requirements

Epaflex TPU bring together experience and innovation. Our products are very easy to use, recycle and re-use, with excellent mechanical properties and aesthetics.

Epaflex can offer footwear manufacturers the best solution to give shape to your ideas.

EPA mould

EPAMOULD

The ideal combination between tradition and innovation

Epaflex legacy's product line for footwear, EPAMOULD TPU offer a wide range of options, including no blooming, hydrolysis-resistant, UV-stabilized, built-in ESD antistatic grades. The well-known excellent processability of our EPAMOULD TPU is the best friend of people in the shopfloor, to ensure a trouble-free smooth user experience.

EPA lite

EPALITE

Your smooth experience of lightness

With EPALITE specialty elastomers, Epaflex brings together lightness and performance. These grades have excellent resistance to thermal abrasion and a special rubber-like haptics. Soles made with EPALITE are up to 15% lighter than soles made with conventional TPU.

EPA met

EPAMET

Our contribution to a sustainable future

With EPAMET bio-based TPU, Epaflex shows its tangible commitment to sustainability. They have exactly the same properties and processability as the corresponding EPAMOULD products, but a high level of bio-content (from non-food renewable resources).

EPASHADE

Give a new color to the shape of your ideas

Premium footwear needs special attention to details such as colors, shades, nuances and textures.

Epaflex recently upgraded its portfolio by adding EPASHADE color masterbatches, specifically designed to offer outstanding compatibility with EPAMOULD, EPALITE and EPAMET.

Polyurethane to give shape to your ideas

Given our 30+ years experience in PU systems for footwear, in EPAFLEX we pride ourselves of being able to offer solutions that will meet and exceed the requirements of footwear designers and manufacturers. And if you decide to use our EPAMET bio-based products, you will be able to demonstrate your commitment to sustainability.



Soles & Slippers

For those who do not accept compromises between lightweight and excellent mechanical properties. EPA-Lightel products and many more...



Footwear

For fashion designers looking for high cushioning effect or for running shoes designers looking for long-lasting high-fatigue resistant materials.



Boots

For producers looking for long-lasting and very comfortable materials for boot legs and very resistant, even in harsh climates, materials for boot soles

EPAFLEX OFFERS A WIDE PRODUCT RANGE FOR SAFETY AND TREKKING SHOES PRODUCERS

No matter if you are looking for single density or double density PU or for a TPU/PU combination. EPAFLEX can offer the solution you are looking for ! And if you want to push PU possibilities to the limit, think of using our EPAXTREME PU systems !



CASE

PU for CASE applications and spray foam

EPAFLEX portfolio for CASE (Coatings, Adhesives, Sealants and Elastomers) applications has been designed with the aim of bringing a technologically updated and economically viable contribution to the construction and industrial machinery markets. EPAFLEX products for CASE are the results of technological innovations based on polymers and special formulations that lead to materials with no emissions, no VOC and no greenhouse gases.

EPAFLEX portfolio for CASE includes following product lines:

- EPA proof** ✖ Aliphatic and aromatic polyurea based elastomers
- EPA crete** ✖ Polyurethane and epoxy primersprimers
- EPA color** ✖ Polyaspartic polyurea and hybrid polyurea for decorative and protective coatings
- EPA seal** ✖ Sealants for joints and grout lines
- EPA lining** ✖ Self levelling two components polyurethane for flooring
- EPA bind** ✖ Aliphatic and aromatic polyurea for coatings
- EPA fur** ✖ Polyurethane systems for rigid spray foam
- EPA dur** ✖ Prepolymers, based on polymeric MDI, pure MDI, uretonimine and carbodiimide modified MDI, mixed isomers
- EPA cast** ✖ Polyurethane systems and chemicals for demanding casting applications

Key applications for EPAFLEX CASE



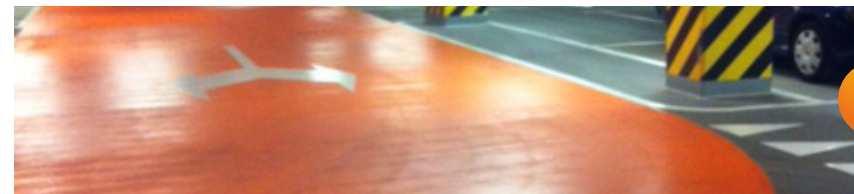
Binders for carpet stone



High gloss self levelling products for flooring



Waterproofing for flat roofs



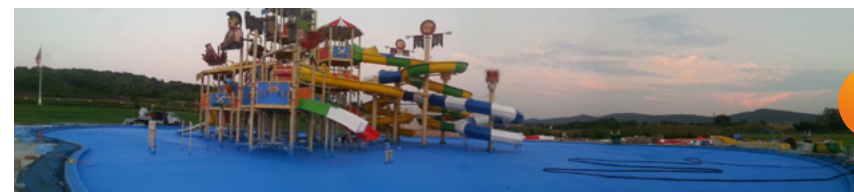
Heavy duty flooring in parkin decks



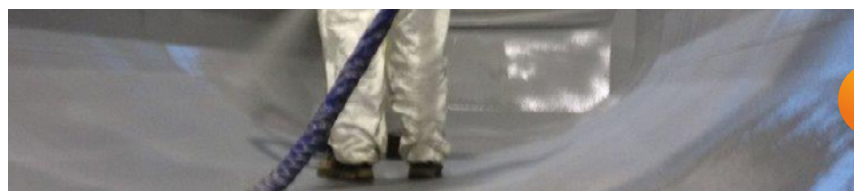
Binders for EPDM tiles for children's playgrounds



Spray foam for thermal insulation in roofs



Aliphatic polyurea for waterproofing



Aromatic polyurea for truck bed protection

Quality Polyurethanes for High Performance Cast Elastomers

Polyurethane chemistry is well known for its unique versatility and cast polyurethanes are no exception to this. EPAFLEX offers a well balanced portfolio of Epacast products to industrial users and is ready to work together with customers to tailor existing products to meet the needs of a relentlessly evolving industry.

Epacast products are developed and manufactured according to the most stringent criteria defined in ISO 9001 standard, and EPAFLEX can leverage its scale to offer products that will help our customers to be competitive and grow in a global market.

Whether you are interested in a polyether or a caprolactone based product for PU casting, EPAFLEX has the solution to your problems in cast polyurethane. To the extent that our existing offering does not meet your needs, EPAFLEX R&D stands ready to further develop the offering to more fully address your applications.

Products MDI

Our MDI based products include prepolymers formulated for a specific hardness and 'QUASI' multi component systems that allow the processor to achieve a range of hardness. Specific performance characteristics are determined through careful choice of the accompanying polyol chemistry.

Products TDI

Our conventional TDI based prepolymers satisfy a range of property/application requirements and are formulated with a special focus on ease of processing.



Quality Polyurethanes for Epadur

EPAFLEX Epadur product range comprises prepolymers based on aliphatic and aromatic isocyanates. Thanks to our more than 30-years experience in prepolymer manufacturing, the flexibility of our assets and our network in the polyurethane industry, we successfully master production of prepolymers for footwear, automotive, coating, adhesives, sealants and elastomers applications.

Our Epadur AR range includes products based on a wide range of different aromatic isocyanate chemistries. Our Epadur AL includes products based on aliphatic isocyanate chemistries.

Safety is of paramount importance to EPAFLEX, therefore we handle all hazardous chemicals in compliance with the strictest regulations and guidelines available in the industry.



**Polyurethane:
Our chemistry
Our soul
Our passion**

Development services and contract manufacturing

EPAFLEX CASE division can offer, thanks to its experience and know-how, a customizable and professional service of development and contract manufacturing of polyurethane adhesives, systems, polyureas and prepolymers.

We can take care of multiple different steps of the process such as raw materials procurement, fine-tuning of formulations, pilot and industrial scale production, packaging, warehousing and delivery.

We are active globally, with a strong presence in Europe, Americas and other geographies. Our key values are flexibility, speed of response, quality, reliability, protection of intellectual property, confidentiality, and on-time delivery. We strive to deliver high quality services wherever we operate, to meet customer needs in a professional way and we pride ourselves on ensuring an outstanding level of confidentiality.

We have state-of-the-art know-how and technology, and we use them to offer high quality solutions and manage complex projects to deliver tailored solutions to our customers.

EPAFLEX CASE division is proud to be among the market leaders and is committed to continuous improvement to be able to meet ever-evolving requirements of customers and partners.

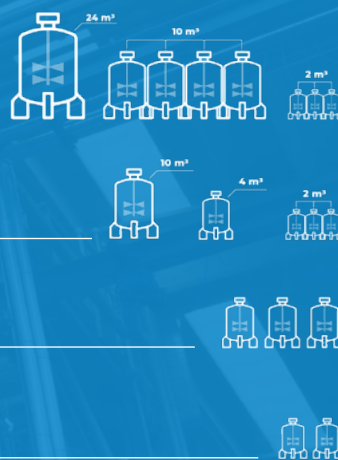
Production capability

8 Reactors for prepolymers

5 Blenders for polyols

3 Pilot reactors

2 Mixing unit for additives



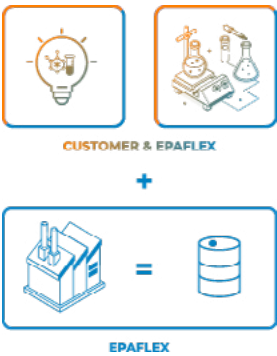
“Tailor-made” service

We can offer a tailor-made service to meet needs of customers who invested in R&D to develop their formulations and are looking either for a pilot scale production or a full-scale industrial production on our assets. We can take care of the full production process to ensure the quality of the products manufactured.



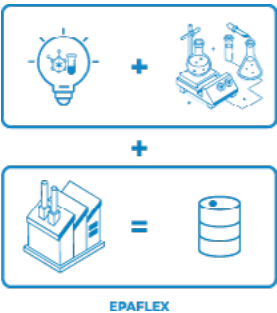
“Co-manufacturing” service

We can offer this service to customers who have one idea and want to shape it into a finished product, working side-by-side with us since the very beginning. We can support each stage of the process, from initial development to the industrial production, thanks to our teams of very experienced and skilled professionals and to our customized and cooperative approach



“Turnkey solutions” service

Our “turn keysolutions” manufacturing service gives our customers the possibility to chose a product out of our portfolio of market-ready solutions, and to customize them with the packaging needed. We can supply high quality products quickly and reliably. This service lets our customers focus on marketing and sales of their products and leaves all other non-core activities to us.



Other services we offer

- R&D Support
- Raw materials procurement
- Preparation of technical information
- Packaging
- Logistics

For more information about our services visit this page:

Contract Manufacturing

Certifications

EPAFLEX Polyurethanes operates in strict compliance with applicable regulations, including in particular REACH and RoHS directives.

EPAFLEX is certified according to:

- **UNI EN ISO 9001 : 2015**
- **ISO 14001 : 2015**
- **ISO 45001 : 2018**



Tel: (+39) 0381 929521
Fax: (+39) 0381929523



www.epaflexpolyurethanes.com
epaflex@epaflex.it



Via Circonvallazione Est, 8, 27023
Cassolnovo PV, Italy

EPAFLEX 
POLYURETHANES