



EPA cast 

C.A.S.E. PRODUCT LINE

**Quality Polyurethanes
for High Performance
Cast Elastomers**

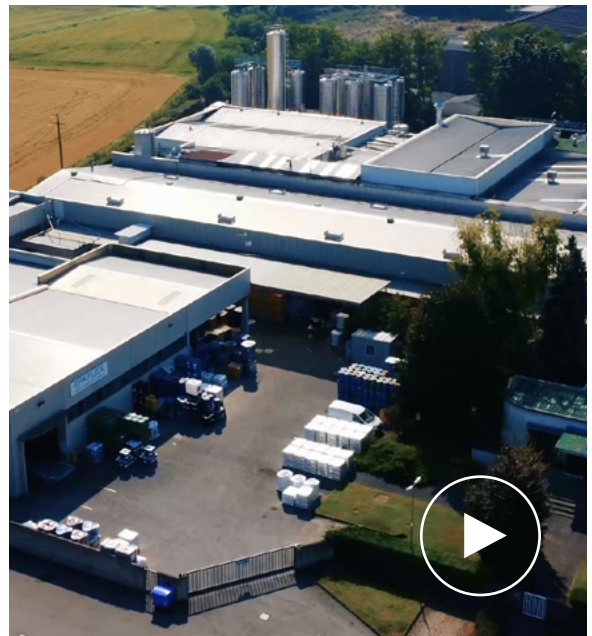
EPAFLEX 
POLYURETHANES

Our history

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 market challenges and customers' needs by 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 Polyurethanes ® forms a vertically integrated industrial group with state-of-the-art manufacturing facilities. 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 Polyurethanes ® 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 products



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. A selection of products are shown below:

		M1P06	M2P06	M4P06	M4P07	M4P11	M4Q18	
% NCO		6.3 - 6.7	6.5 - 6.9	5.8 - 6.2	7.3 - 7.7	11.3 - 11.7	18.3 - 18.7	
Viscosity (mPas)		1500-2000 @80°C	450-750 @100°C	1000-1500 @ 80°C	1000-1500 @ 70°C	500-700 @ 60°C	200-400 @ 40°C	
Curative		BDO	BDO	Epacast P4000/R	BDO	N/A	Epacast P 4000/BDO	
Hardness (Shore)		85A	85A	70A-95A	90A	N/A	60A-95A	
Ester		✳	✳					
Ether				✳	✳	✳	✳	
Wear Resistance		✳	✳	✳	✳	✳	✳	
Dynamic performance		✳		✳	✳	✳	✳	
Solvent Resistance		✳	✳					
Hydrolysis Resistance				✳	✳	✳	✳	
Typical applications		Minig screens, pipeline pigs	Scrapers, technical components	High Load/ speed rollers	Mining screens	Paper mill rollers	Technical components, wheels	

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. A selection of products are shown below:



	T1P03	T2P04	T4P03	T4P04	T4P06	T6Q20	
% NCO	3.3-3.7	4.0-4.4	4.1-4.5	4.1-4.5	6.1-6.5	19.3-20.3	
Viscosity (mPas)	1500-2200 @80°C	2200-2800 @80°C	500-900 @100°C	900-1500 @70°C	100-250 @100°C	275-375 @25°C	
Curative	MbOCA / TMP	MbOCA / TMP	MbOCA	MbOCA	MbOCA	N/A	
Hardness (Shore)	85A / 55A	92A / 60A	82A	90A	95A	N/A	
Ester	✳	✳					
Ether			✳	✳	✳	✳	
Wear Resistance	✳	✳	✳	✳	✳		
Dynamic performance			✳	✳	✳		
Solvent Resistance	✳	✳					
Hydrolysis Resistance			✳	✳	✳		
Typical applications	Pipeline pigs, rollers	Paint/lacquer Rollers	Pipe lining, rollers/wheels	Mining screens, high load rollers/wheels	High load rollers/wheels	Precursor for low cost prepolymers	



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