ingevity®

PURIFY | PROTECT | ENHANCE

Capa® Caprolactones for Polyurethane Elastomers

Upgrade your formulations with Capa

We are Ingevity

Ingevity provides specialty chemicals, high-performance carbon materials and engineered polymers that purify, protect and enhance the world around us. Through a team of talented and experienced people, Ingevity develops, manufactures and brings to market products and processes that help customers solve complex problems. These products are used in a variety of demanding applications, including asphalt paving, oil exploration and production, agrochemicals, adhesives, lubricants, publication inks, coatings, elastomers, bioplastics and automotive components that reduce gasoline vapor emissions.

One molecule, millions of opportunities

Ingevity is the world leader in the production and development of caprolactone technology under the Capa® family of products. For the last 40 years, our experienced team and high-quality caprolactone products have earned the reputation of a trusted innovation partner that helps customers create winning formulas. Capa products add value to current formulations and also offer the potential for customers to create new high-performing products in the areas of coatings, polyurethane (PU) elastomers, adhesives, and bioplastics.

Number one worldwide
in caprolactone and derivitives

Best in industry
manufacturing capabilities.

Dedicated innovation experts
focused on continued process and application development.

World class R&D facilities
to develop downstream derivatives that meet customer and market needs.

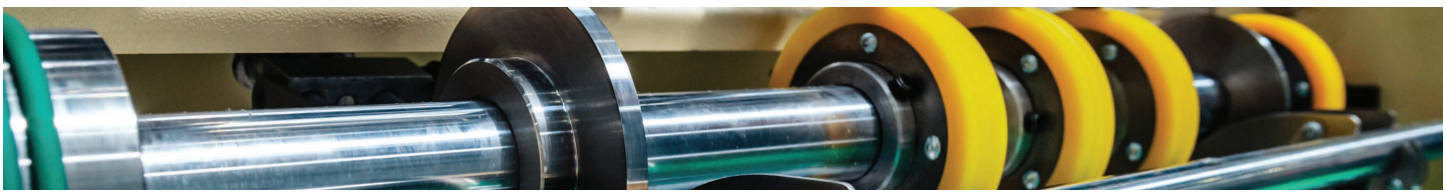
Global sales force
with close customer relationships that support product development

For high-performing elastomers

Polyurethane elastomers are an integral part of a variety of products where durability and high-performance are critical. Capa enhances the ability of PU elastomers to handle heat, cold, wear, stress and harsh chemicals.

Capa polyols for thermoplastic and cast polyurethane elastomers significantly enhance the processing and performance properties that enable optimal, lifetime performance in end-use products like gaskets, seals and O-rings.

Capa polyols can also benefit cast and microcellular PU elastomers by providing added strength, durability and flexibility for various industrial products like rollers, mining screens, athletic sneakers and jounce bumpers.



Processing advantages

Easier processing: Capa polyols have a low melt viscosity which means easier raw material and product processing.

Higher consistency: The narrow molecular weight of Capa polyols translates into more consistent end-product quality in your formulations.

Performance advantages

Increased versatility: Because of the wide working-temperature range of Capa molecules, elastomers benefit from added versatility in conditions that are hot, cold and everywhere in between.

Improved durability: The combination of Capa's strength and resilience mean your elastomers can be more resistant to fatigue and dynamic forces. Capa combines the benefits of polyester adipates and polyethers.

Enhanced chemical resistance: The low acid-value of Capa molecules helps elastomers better resist the harsh effects of heat, hydrolysis and chemicals.

Business opportunitites

Tailor-made formulations: With over 40 years of technical expertise and product quality, we are uniquely situated to partner with customers to ensure optimally performing formulations and end-use products.

Improved appearance: Premium elastomer products made with Capa are able to keep their shape and aesthetic appearance throughout their useful life, promoting brand value and consumer trust.

Reduced downtime: The ability of Capa products to impart greater durability, abrasion resistance and resilience to elastomers means your formulations and products have reduced costs associated with maintenance and downtime.

Capa polyols for elastomers

Product Family	Capa Grade	Mw*	OH Value* (mg KOH/g)	Acid Value* (mg KOH/g)	Appearance @25°C	Point DSC (°C)	Viscosity* @25°C	Viscosity* @60°C	TPU	HCPU	CCPU	MCU
Standard Diols	Capa 2043	400	280	<0.25	Clear Liquid	0-10	240	40	•	•	•	•
	Capa 2054J	540	204	<0.25	Clear Liquid	0-10	310	60	•		•	•
	Capa 2065	650	172	<0.25	Clear Liquid	10-20	585	80	•	•	•	•
	Capa 2085	830	135	<0.25	Soft Wax	30-40	2700	100	•	•		•
	Capa 2101	1,000	112	<0.25	Waxy Solid	20-30	Solid	150	•	•		•
	Capa 2125	1,250	90	<0.25	Waxy Solid	35-45	Solid	180	•	•		•
	Capa 2201	2,000	56	<0.25	Waxy Solid	40-50	Solid	480	•	•		•
	Capa 2204J	2,000	56	<0.25	Waxy Solid	45-55	Solid	630	•	•		•
	Capa 2205	2,000	56	<0.25	Waxy Solid	45-55	Solid	435	•	•		•
	Capa 2209	2,000	56	<0.25	Waxy Solid	45-55	Solid	380	•	•		•
	Capa 2303	3,000	37	<0.25	Waxy Solid	50-60	Solid	1,100	•	•		•
Premium Diols	Capa 2047A	400	280	<0.05	Clear Liquid	0-10	230	43	•	•	•	•
	Capa 20610AJ	600	187	<0.05	Clear Liquid	10-20	Liquid	100	•	•	•	•
	Capa 2077A	750	150	<0.05	Waxy Solid	15	Solid	85	•	•		•
	Capa 2101A	1,000	112	<0.05	Waxy Solid	20-30	Solid	150	•	•		•
	Capa 2123A	1,250	90	<0.05	Waxy Solid	40	Solid	240	•	•		•
	Capa 2141A	1,400	80	<0.05	Waxy Solid	35-40	Solid	175	•	•		•
	Capa 2161A	1,600	70	<0.05	Waxy Solid	40-50	Solid	300	•	•		•
	Capa 2201A	2,000	56	<0.05	Waxy Solid	40-50	Solid	480	•	•		•
	Capa 2203A	2,000	56	<0.05	Waxy Solid	45-55	Solid	460	•	•		•
	Capa 2241A	2,400	47	<0.05	Waxy Solid	40	Solid	831	•	•		•
	Capa 2403D	4,000	28	<0.25	Waxy Solid	55-65	Solid	1,670	•	•		•
Triols	Capa 3022	240	540	<0.5	Clear Liquid	0-10	195	40			•	•
	Capa 3031	300	550	<1	Clear Liquid	< -20	1600	170		•	•	
	Capa 3041	425	390	<1	Clear Liquid	0-10	1200	160		•	•	
	Capa 3050J	540	310	<1	Clear Liquid	0-10	1200	160		•	•	
	Capa 3091	920	182	<1	Clear Liquid	0-10	1250	165		•	•	•
Tetrols	Capa 4101	1,000	225	<1	Clear Liquid	-20	1800	260			•	•
Co-Polymers	Capa 7201A	2,000	56	<0.05	Waxy Solid	30-35	Solid	315	•	•		•
	Capa 8015D	1,000	112	<0.05	Clear Liquid	0-10	2000	216	•	•	•	•
	Capa 8025D	2,000	56	<0.05	Clear Liquid	0-10	6500	870	•	•	•	•

*Average mean values are provided, actual specification is a narrow range of this value.
TPU: Thermoplastic Polyurethane/ HCPU: Hot Cast Polyurethane/ CCPU: Cold Cast Polyurethane/ MCU: Microcellular Polyurethane

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