## ingevity

PURIFY | PROTECT | ENHANCE

#### **Capa® Caprolactones for Coatings**

# Polyols for premium polyurethane coatings and stoving enamels





### 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.

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 offerings have earned the reputation of a trusted innovation partner that helps customers create winning formulas. Capa products add value to current formulations and enable customers to create new higher-performing products in the areas of coatings, polyurethane elastomers, adhesives, and bioplastics.

## One molecule, millions of opportunities

The Capa product portfolio includes Capa monomer, polyols and thermoplastics. The multifunctional nature of our Capa polyol and thermoplastic products is the result of a unique ring-opening polymerization process used during manufacturing. The process is conducted under highly controlled conditions that eliminate the production of unwanted byproducts such as water, and creates caprolactones with a low acid value, closely defined functionality, low polydispersity and a high degree of reproducibility. How can our array of Capa caprolactones enhance the processing and performance advantages of your products, or open new product or market opportunities for your business?



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-performance coatings

Ingevity has the expertise necessary to help customers create premium coating formulations for the most demanding indoor and outdoor commercial applications. From wind turbines, to metal and plastic automotive parts – coatings formulated with Capa are longer-lasting and built to perform.



## One-component (1K) stoving enamels

Cured at temperatures over 130 C, stoving finishes are coatings valued for their toughness and abrasion and chemical resistance. The linear aliphatic structure of Capa polyols facilitates flexible 1K stoving formulations without compromising the final hardness, which is particularly important for high-performance automotive parts and coil coatings.

## Two-component (2K) polyurethane coatings

2K waterborne and solvent-borne polyurethane coatings are topcoats designed to withstand high levels of wear and tear from outdoor exposure. Adding Capa polyols into 2K formulations can reduce volatile organic compounds (VOCs) which increases the high-solid content of the coating. The low viscosity and good compatibility of Capa polyols can also improve flow and leveling of the coating and improve film formation.







#### **Processing advantages**

- Low viscosity means easier application and reduced VOCs
- Behaves like a reactive coalescing agent, improving the film formation of waterborne coatings

#### **Performance advantages**

- Impressive weather, abrasion, impact and chemical resistance
- Ultimate combination of flexibility and toughness
- Excellent finish and appearance with high gloss and low haze

#### **Business advantages**

- Extends the life of coated surfaces
- Lowers servicing and maintenance costs
- Improves product sustainability

#### Capa polyols for coatings and enamels

Capa Grade	Туре	Mw	OH Value, mg KOH/g	OH%	Viscocity, mPas@ 23°C	Recommendation
Capa 2043	Diol	400	280	8.5	240	2K PUR/1K HMMM
Capa 2054J	Diol	550	204	6.2	340	1K HMMM
Capa 2085	Diol	830	135	4.1	330 (35°C)	1K HMMM
Capa 3050J	Triol	540	310	9.4	1,190	2K PUR
Capa 3091	Triol	900	183	5.5	1,246	2K PUR/1K HMMM
Capa 4101	Tetrol	1,000	218	6.6	1,850	2K PUR

#### Ingevity

5255 Virginia Avenue North Charleston, SC 29406 843 740 2300

#### ingevity.com/capa

