Kodak

Sc

Specialty Chemicals

- F — PET/CTA Films
- Pc — Printed Circuit Boards
- **Sc — Specialty Chemicals**
- Ct — Coating & Testing Services
- G — Gravure Services
- Sr — Solvent Recovery
- Fp — Functional Printing
- Eb — Eastman Business Park

Your vision. Our experience. The perfect chemistry.

For more than a century, Kodak has been giving imagination an outlet by creating new ideas, then finding chemical processes to bring them to life. The ability to produce specialty chemicals that utilize complex processes has made Kodak one of the world's most respected and influential companies. With over 500 distinct molecules in production, more than 1,500 approved manufacturing processes, and experience with more than 100,000 complex chemicals, we empower progress every day. Let Kodak's Specialty Chemicals Group put our experience to work for your needs.

POLYMERS
Kodak Specialty Chemicals






Great ideas mean little without the capacity to execute them

Working with Kodak allows you to draw on our expertise in process development, design for manufacturing, and statistical process control. In other words, we can take a process from the "white board" into production.

We're flexible enough to produce the smallest and largest batch sizes, which gives you flexibility of choice. And our broad product portfolio includes 1,500 approved manufacturing processes. Plus, confidential custom manufacturing services are available.

Great results give no advantage if they're not repeatable

A commitment to safety, health, the environment, high quality, and high technology are more than just our goals. They're part of our DNA. Kodak has designed and manufactured chemicals for over 100 years, a heritage we simply could not have built without a firm set of standards.

Our Six Sigma Black Belt focus on quality and decades of expertise with specialty chemicals development and manufacturing means Kodak knows how to get things right the first time, and get them right consistently, batch after batch.

Great companies are judged by the relationships they build

A relationship with Kodak is a collaboration with a U.S. manufacturer that has global capabilities. It's a relationship built on a century-long tradition of making the complex simpler. And it's built on trust.

That's why vibrant companies in industries ranging from medical imaging to personal care products, from agriculture to graphics and printing collaborate with Kodak's Specialty Chemicals Group. They understand the benefits of working with a U.S.-based company that has global capabilities. They enjoy our dedication to customer service. And they take comfort in a partnership that guides business forward.

Polymeric Beads

Product Name	PR62	PR41 PR52 PR53	PR79	PR762	PR47	PR18 PR39	PR052	PR08 PR054	PR65	PR06	PR93
Monomer Composition											
Vinyl Toluene					80%						
Divinyl Benzene 55 *	2%				20%				3%	20%	
Divinyl Benzene 80 †						100%					
Methyl Methacrylate	98%	100%	100%				60%		97%		90%
Methacrylic Acid							40%				
Ethylene Glycol Dimethacrylate				20%							10%
Butyl Acrylate				80%						40%	
Styrene								100%		40%	
Typical Median Particle Size, μm	0.5	0.6 1.3 2.1	1.3	1.6	1.3	3.5 1.7	1.5	6.9 6.7	9.6	8.6	3.7
Classified	No	No	No	No	No	No	No	No	Yes	Yes	No
Typical Dispersant	Water	Water	Water	Water	Water	Dry or Methanol	Water	Water	Dry	Dry	Dry
Contains Silica	No	No	No	No	No	No	No	with and without	Yes	Yes	Yes
Contains Gelatin	No	2 wt%	No	2 wt%	2 wt%	No	No	No	No	No	No

* Divinyl Benzene (55%) contains 45% ethylvinylbenzene.
† Divinyl Benzene (80%) contains 20% ethylvinylbenzene.





Durability Polymers

Name	Counter Ion	Aliphatic	% Solids	Acid Number	Mw
PR25	Potassium	X	25	76	25K
PR37	Potassium	X	25	76	25K
PR94	Potassium	X	25	100	20K
PR31	Potassium	X	25	105	20K

Kodak's group of polyurethane durability polymers find application for both their abrasion resistance and aesthetic properties:

- Provide glossy overcoat
- Abrasion resistance
- Sealing and bonding overcoat

Acrylic Polymers

Name	Counter Ion	Aromatic	Aliphatic	Co-solvent	% Solids	Acid Number	Mw
PDP10	Potassium	X		Dowanol PM	18	215	8K
PDP66	Potassium	X		None	25	150	7K
PDP64	Amine	X	X	Dowanol PM	18	215	9K
PDP07	Potassium	X	X	Dowanol PM	18	215	9K
PDP83	Potassium	X	X	Dowanol PM	16	140	8K
PR54	None		X	None	100		
PR925	None		X	None	100		

Kodak's group of acrylic polymers perform a wide range of functions:

- Polymeric dispersant
- Colloid stabilizer
- Photoresist applications

These products are useful in various markets like cosmetics, consumer products and electronics.





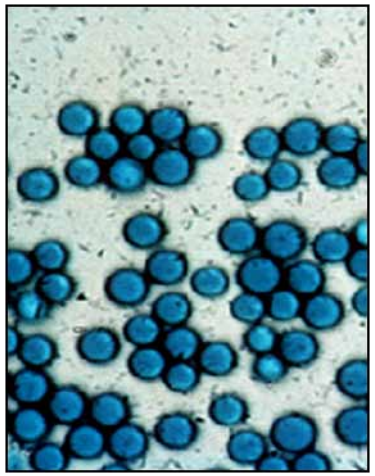
Custom Functional Polymers

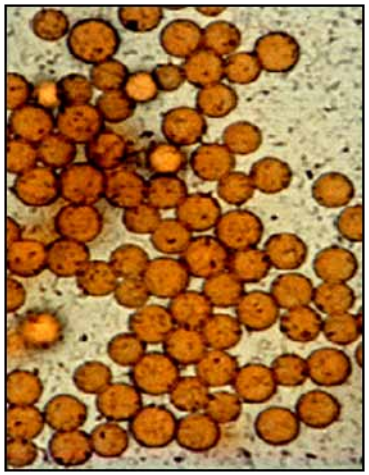
Kodak's strength in functional polymers is our ability to make in a non-melt process using solution, emulsion and suspension polymerization. This allows greater selectivity of molecular weight, particle size control and processes that can be run at lower temperatures, allowing greater range of functional groups.

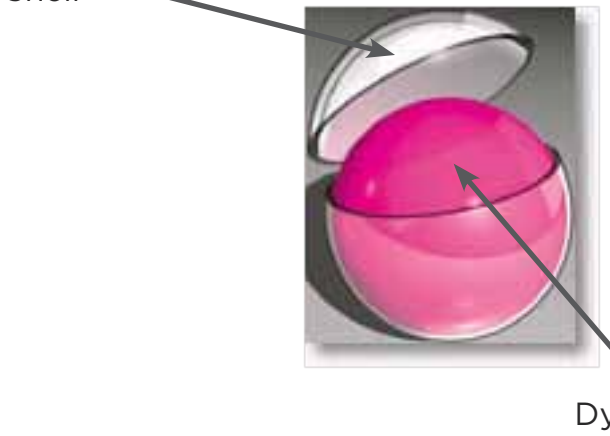
Classes of polymers include:

- Photopolymers — Novolaks, acrylic polymers
- Adhesion promoter polymers
- Coating aid and "carrier" polymers
- Rheology modifiers
- Mordant polymers

Encapsulation







- Encapsulated/Incorporated solid and liquid addenda
  — dyes, pigments, UV absorbers, lubricant
- Novel microencapsulation process that is capable of generating microcapsules of narrow size distribution and of various sizes not by the amount of shear but by Kodak's proprietary formulation.

For further information please visit www.kodak.com/go/specialtychemicals or contact us at specialtychemicals@kodak.com.

Kodak