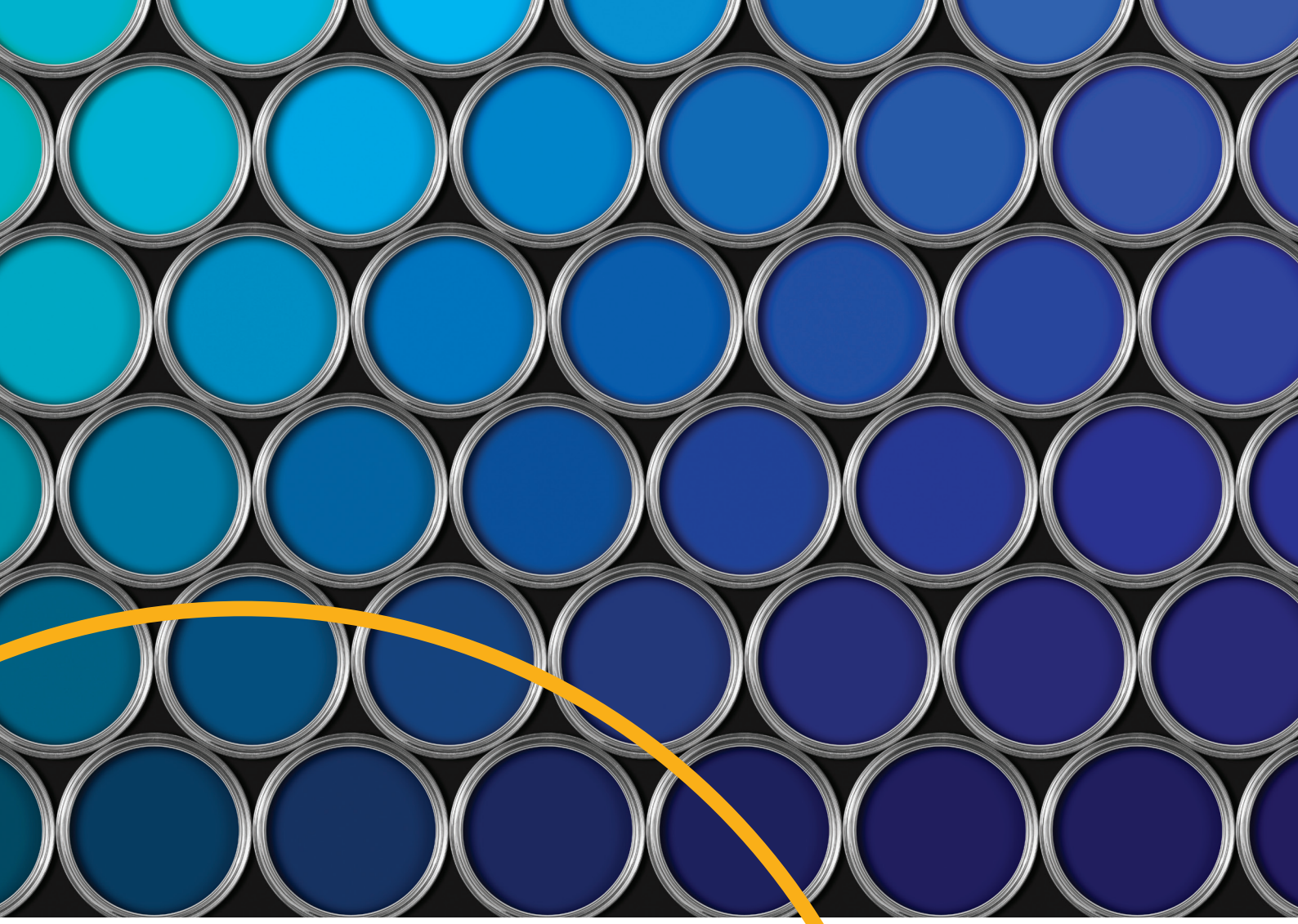


Elvacite™

Specialty Acrylic Bead Resins for Coatings, Inks, and Adhesives

MITSUBISHI CHEMICAL GROUP

Sometimes What You Don't See Matters Most

When it comes to formulating world-class coatings, inks, and adhesives, **Elvacite™ specialty acrylic bead resins** from Mitsubishi Chemical Group (MCG) help you make everyday essentials work. Often unseen but always indispensable, these adaptable, transparent, and durable resins empower your solutions to perform their best. With Elvacite™ bead resins, your coatings better resist UV, heat, and abrasion. Your inks appear more vibrant. Your adhesives bond to various substrates with enhanced confidence. These specialty resins are highly customizable to meet your unique requirements.

At MCG, we know performance is only one part of the equation. You deserve a partner you can trust to provide high-quality materials that minimize risk, meet regulations, and maintain your competitive edge. That's where we come in. With 80 years of resin expertise, we combine technical knowledge, a commitment to sustainability, and a reliable global supply to deliver solutions you can count on—every step of the way.

Partners in Smart Solutions

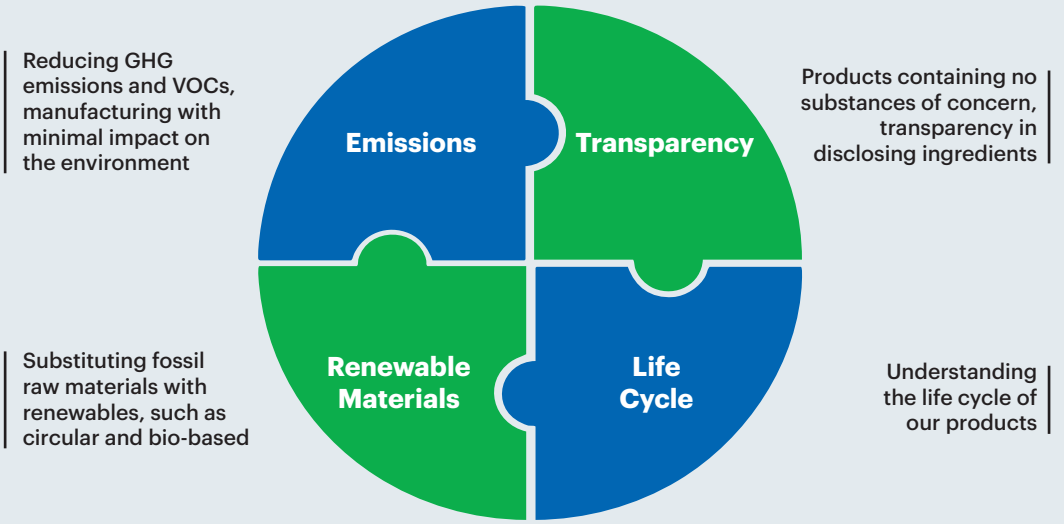
MCG is more than a supplier—we're your committed partner. Our **research and development team** collaborates with you to create **custom solutions,** and our technical specialists help you optimize formulations and solve processing challenges. Together, we can achieve better results.

Reliable Resins, Every Time

At MCG, consistency matters. Our **ISO 9001:2015 certified facilities** ensure every batch meets the same high standards. You get dependable, uniform performance with every order. Fewer surprises. More peace of mind.

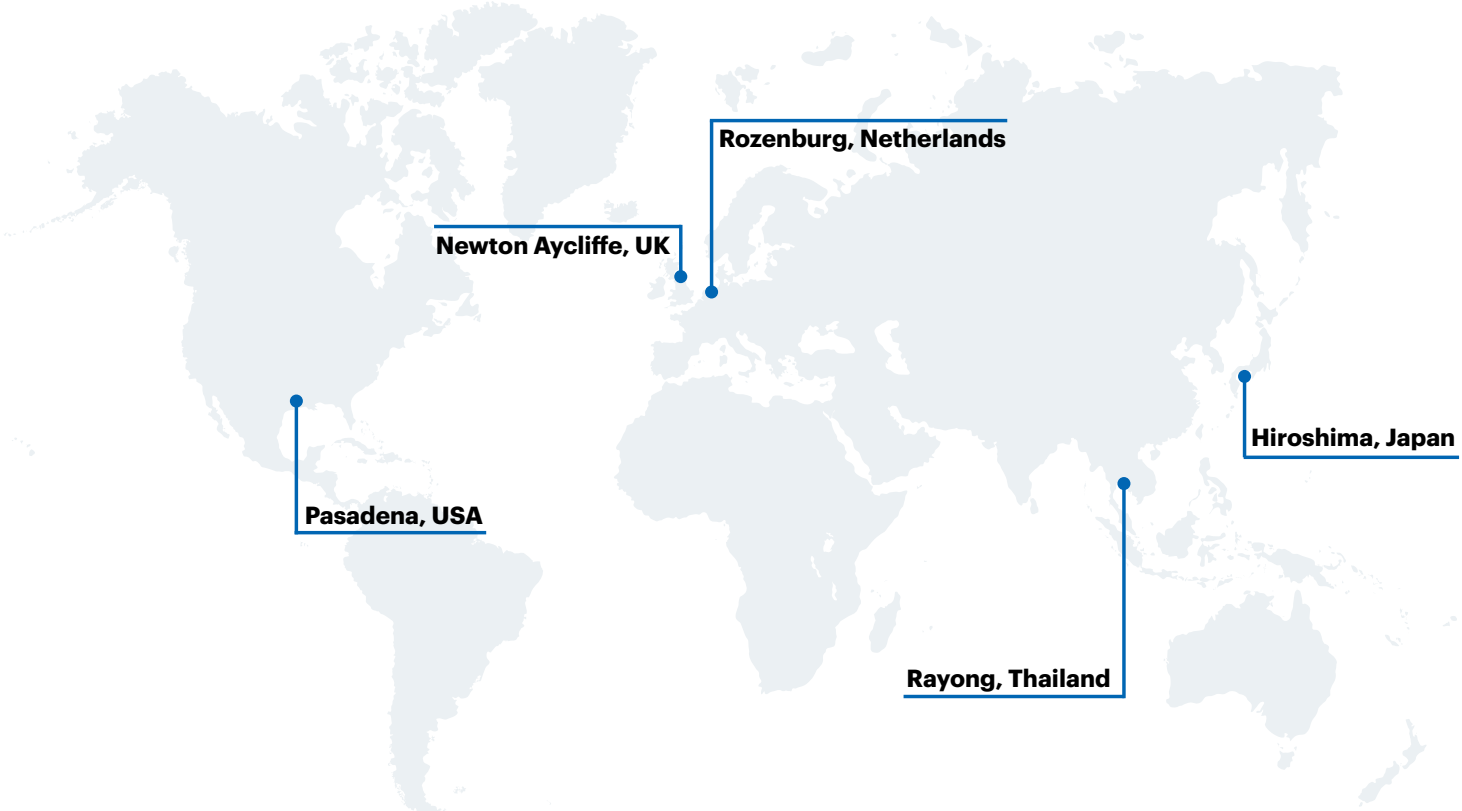
Sustainability and Quality, Hand in Hand

Our mission is to realize **KAITEKI,** the well-being of people and the planet. That's why our solvent-free manufacturing processes enable eco-friendly resins that deliver consistent, powerful results. Let's work together to create solutions for a healthier, more sustainable future.



Global Reach

Our manufacturing, sales, and technical service facilities are strategically located in the US, UK, Japan, the Netherlands, and Thailand to ensure **reliable supply and service** where and when you need it.



Precision, Performance, and Possibilities

With customizable capabilities and over 100 commercial grades, Elvacite™ empowers you to design formulations that meet your exact needs, now and in the future.

The solid bead form of Elvacite™ is produced through aqueous suspension polymerization. This method allows us to manipulate the particle size and incorporate a wide range of specialty monomers—giving you more freedom with your formulations.

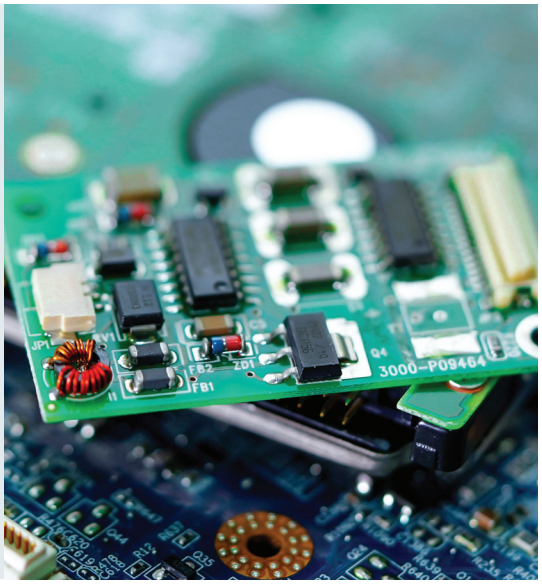
Key Benefits:

- **Uniform, consistent quality:** Ensures reliable results
- **Highly customizable:** Meets specific application requirements with ease
- **Solvent-free:** Reduces environmental footprint and simplifies storage and transport
- **Fast dissolving, free flowing:** Helps optimize manufacturing and lower carbon emissions
- **Robust adhesion:** Bonds to a variety of substrates

Powering Progress Across Industries

From everyday essentials to advanced technologies, our materials support performance in industries where reliability matters most:

- Automotive
- Electronics
- Packaging
- Graphic Arts
- Industrial
- Building & Construction
- Medical
- Consumer Goods



Versatile Solutions for Every Need

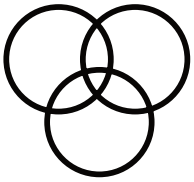
No matter your application, Elvacite™ is built to meet the challenge.

UV Resistance

Weatherability

Abrasion Resistance

High Gloss and Hardness

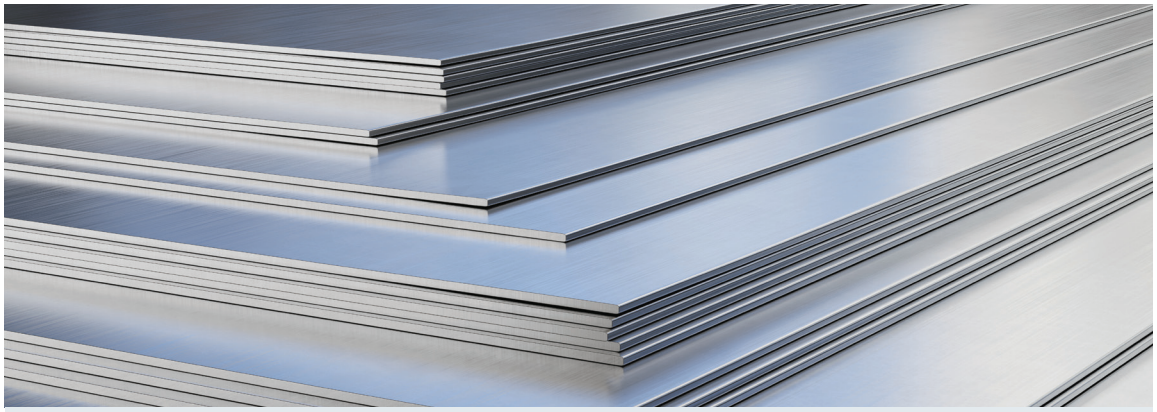


Low Pigment Reactivity

Water-white Transparency

Heat Resistance

Chemical and Corrosion Resistance



Stronger Adhesion, Tougher Coatings

The Challenge: Some metal surfaces are too smooth or polished for coatings to properly adhere, often requiring extra surface treatments like sandblasting or etching. Without a strong bond, coatings can fail due to:

- Poor adhesion on untreated metal surfaces
- Cracking during thermal expansion and contraction
- Rapid degradation in harsh marine environments

These issues can lead to higher costs for customers and can reflect negatively on a manufacturer's reputation.

Our Solution: Switching to Elvacite™ TB-322 eliminates these challenges. The resin delivers:

- Strong adhesion to unprimed metals
- Flexibility to resist cracking, even in extreme conditions
- Superior resistance to corrosion and UV damage
- Easy integration into production with fast dissolution and wide solubility

Excellent Results: Elvacite™ TB-322 helps manufacturers deliver tougher, more reliable coatings—elevating their product quality, reducing maintenance costs to boost customer satisfaction, simplifying production, and expanding their market reach into high-performance coating applications.

Featured Elvacite™ Products

Each specialty resin grade offers distinct features. Blend them seamlessly or pair them with additives to unlock even more possibilities. Additional grades are available in our complete product line up.

Elvacite™ Resin	Tg (°C)	Mw (g/mol)	Acid # (mg KOH/g)	OH # (mg KOH/g)	Category	Main Benefits	Applications
2009	81	75,000	2	0	Hard	Soluble and soft with strong chip resistance.	Lacquers as barrier top coat for vinyls
2013	76	30,000	4	0	Performance	Fast dissolving, low viscosity with quick solvent release.	Industrial lacquers, aerosols, inks, plastic coatings, rotogravure inks, hot stamping
2014	41	130,000	12	0	Performance	Soft and flexible. Enhances clear, translucent finishes. Good pigment wetting.	Wood finishes, translucent or pigmented metal lacquers, e.g., aircraft
2028	45	60,000	11	0	Weak solvent	Broad solubility and compatibility.	Flexographic inks, general-purpose lacquers, metal coatings
2041	105	397,000	0	0	Hard	Very high Mw. High abrasion, block, and slip resistance.	General coatings, automotive upholstery vinyl barrier top coatings
2042	65	270,000	0	0	Weak solvent	Tough, alcohol-tolerant, and broadly compatible. Excellent abrasion resistance.	General coatings, high-gloss lacquers, decals, outdoor signs
2043	66	40,000	8	0	Weak solvent	Most compatible grade. Low viscosity for broad solubility. Excellent pigment wetting.	Flexographic inks, lacquers
2045	50	260,000	0	0	Weak solvent	Hardest weak-solvent-soluble butyl grade. Clean burn out.	Ceramic inks, screen inks, graphic arts binders, temporary binders, aerosol lacquers, vacuum metalized plastics
2046	35	200,000	0	0	Adhesion	Medium-hardness butyl grade. Soluble in mineral spirits, VM&P Naphtha, and some alcohols.	Aluminum finishes, ceramic coatings
2552C	90	65,000	0	0	Hard	High-gloss depth. UV resistance. Cracking and glazing resistance.	Metal and plastic finishes
4014	60	59,000	1	2	Functional	Hydroxyl (OH) functional. Strong adhesion and flexibility.	Reactive hot melt adhesives
4345	20	210,000	0	0	Adhesion	Free flowing. Low Tg. Improves outdoor durability of vinyl chloride resins.	Smooth plastic films, aluminum, silkscreen inks, pigmented lacquers
BR-106	45	55,000	3	0	Performance	General purpose grade. Acid content improves adhesion and pigment dispersion.	Metal marine and container coatings, road marking paints
BR-115	50	50,000	0	0	Weak solvent	Compatible with long and medium oil alkyd resins.	Flexographic inks, temporary binders
BR-119	85	15,000	4	0	Hard	Low viscosity.	General coatings
BR-52	106	85,000	0	0	Hard	Chemical resistance. High gloss.	General coatings
BR-57	56	55,000	7	0	Styrene acrylic	Improves higher solids coatings.	Concrete cure and seal

Featured Elvacite™ Products (continued)

Elvacite™ Resin	Tg (°C)	Mw (g/mol)	Acid # (mg KOH/g)	OH # (mg KOH/g)	Category	Main Benefits	Applications
BR-605	60	40,000	228	0	Functional	Modifies emulsion paints and temporary protective coatings.	Waterborne coatings
BR-80	105	100,000	0	0	Hard	Hardest BR series grade. Tough with excellent durability and water/ weather resistance.	PVC coatings or overprint varnishes
BR-88	105	1,500,000	0	0	Hard	Very high Mw PMMA for tough, clear finishes.	General coatings
MB-2588	33	120,000	15	0	Adhesion	Softer, more flexible. Soluble in weak solvents.	Adhesives, staple cement
MB-2594	90	8,000	7	0	Ultra-low Mw	Acid functional resin.	Pigment dispersion
MB-2595	90	11,000	0	0	Ultra-low Mw	Amine functional resin.	Pigment dispersion
MB-2660	55	60,000	4	0	Performance	High gloss and alcohol resistant.	General coatings, plastic coatings
MB-2752	90	25,000	7	90	Functional	Highest OH value.	Two-component reactive coatings
MB-2823	82	25,000	0	0	Functional	Good compatibility with short oil alkyds.	Coating additive
MB-2876	75	25,000	5	8	Functional	High toughness, low viscosity.	Industrial coatings
MB-8031	34	110,000	0	0	Performance	Medium Mw. Low Tg.	Heat seal lacquers
TB-044	48	60,000	3	0	Weak solvent	Low VOC. Enhanced solubility in low Kb solvents.	Graphic arts
TB-197	44	160,000	15	53	Functional	OH functionality allows it to be cured with an isocyanate crosslinker.	PU coatings
TB-237	46	110,000	3	0	Weak solvent	General purpose grade. Acid functionality for improved adhesion to metal.	Wood coatings
TB-250	130	5,000	3	0	Ultra-low Mw	Food packaging ink compliant, high compatibility. Excellent pigment wetting.	Pigment dispersions
TB-322	50	60,000	4	0	Adhesion	Excellent adhesion to metallic substrates.	Metal coatings
TB-334	46	80,000	4	0	Adhesion	Useful as a binder or adhesion promoter for bonding plastics like PET, PVC, polystyrene, polycarbonate, nylon, FRP.	Plastic coatings
TB-339	55	130,000	0	0	Adhesion	Useful for bonding untreated PE, PP, PVC, PET, ABS, PC, and nylon.	Plastic coatings
TB-340	-10	260,000	0	0	Adhesion	High Mw. Robust, flexible, with unique adhesion, hydrophobicity, and chemical resistance.	Plastic adhesion

Formulations Built Around You

Need a custom formulation for your unique challenge and goal? Don't worry—our experts will collaborate with you to craft it. If you need a specific level of flexibility, viscosity, hardness, solubility, high or low solids, elongation, or adhesion, our pilot plant and development facilities can help make the process seamless and efficient.

Together, We Bring Performance and Possibility to Life

Ready to get started? Our team is ready to work with you on your next formulation.

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