Resins for Electronic Materials

- Ripoxy™

Substrate solder mask

- Nippon Polytech Corp.

Functional resin design

- Chloroprene Polymers
  - Shoprene™

Polymerization control

- Chlorinated Polyethylene

- Elaslen™

Mixing/dispersion

- Rigolac™, Ripoxy™

Molding/casting

- Polysol™

Resins for Composite Materials

- Shoprene™

Molding Compounds

- Rigolac™ molding material

Synthetic Resin Emulsion

- Nippon Polytech Corp.
Our technologies

- **Polymer design technology**

Providing photocuring and thermosetting resins with various characteristics
- Developability, heat resistance, solvent resistance, flexibility, high refractive index, adhesion, optical transparency, dispersibility, etc.

Polymer design meeting the required performance

Family of products constituting Ripoxy™ and examples of applications

- Epoxy acrylate resin
  - Applications: Solder resist, various paints, dicing tape
- Acrylic resin
  - Applications: Color filter resist, semiconductor resist
- Urethane acrylate resin
  - Applications: Adhesive for optical use
**Synthetic Resin Emulsion ~ Polysol™ ~**

**Product Example**

- Adhesive for tapes
- Fiber processing resin
- Adhesive for building materials
- Paint binder for exterior materials

**Our technologies**

We optimize the synthetic resin emulsion “Polysol™” to suit various applications.

- **Polymer design technology**
  (Acrylic, vinyl acetate, ethylene-vinyl acetate)

- **Morphology control technology**
  (Particle diameter, particle shape, heterophase structure)

- **Emulsion design**
- **Modification technology**
- **Processing technology**
Resins for Composite Materials
〜Rigolac™, Ripoxy™〜

Product Example

- Chemical tank
- FRP waterproofing
- Resin concrete
- Pipe lining
- Floor material
- Heat-proof paint

Our technologies

- **Synthesis technology**
  With a focus on unsaturated polyester resin, vinyl ester resin, and urethane-acrylic resin, we own resin synthetic technology meeting such requirements as flexibility, hardness, high strength, and high heat resistance. We can also develop new resin systems.

- **Compounding technology**
  While considering the final usage environment and purpose, we can propose usage methods such as compounding additives, including fillers, curing agents, and accelerators, while also drawing up construction specification proposals, for example.

- **Physical property evaluation**
  We can evaluate the basic properties of products and make various measurements while considering the actual usage conditions.

- **Technical guidance**
  To prevent troubles when the products are used, we can attend and provide technical guidance as required when the products are used. If any trouble arises, we will study countermeasures.

Improve
Develop
Evaluate
Technical guidance
Molding Compounds
〜Rigolac™ molding compounds〜

Product Example

- BMC (Bulk Molding Compound)
  - Formulation technology
    We provide optimally formulated thermosetting molding materials that meet customers’ requirements.

- SMC (Sheet Molding Compound)
  - Moldability evaluation technology
    We own various molding machines and can mold prototypes and will propose molding conditions that optimize the physical properties.

- Physical property evaluation technology
  We can evaluate various physical properties of molded parts in-house, such as mechanical properties, electrical properties, and chemical resistance.

Our technologies

- BMC (Bulk Molding Compound)

- SMC (Sheet Molding Compound)

Product Example

- Body
- Head lamp reflector
- Motor for HV/EV
- Breaker (Heavy electric parts)
- Motor for home appliances

This is a BMC molded part.
Product Example

Permanent insulating layer for high precision circuits (COF: Chip on Film) mounted with IC driving LCD.

Taking advantage of its excellent insulation reliability and durability, the film improves the image quality of LCD TVs and smartphone LCD panels.

Our technologies

We can design functional polymers that satisfy various required characteristics according to customers’ demands, and also design ink and paint products that adapt to the customer’s process by using formulation and dispersion technologies.

- **Functional resin design technology**
  - High insulation properties
  - Flexibility
  - High durability
  - High reliability
  - Reactivity
  - Toughness

- **Formulation technology**
  - Process compatibility design
  - Printability
  - Curability control

- **Mixing/dispersion technology**
  - Dispersed particle size control
  - Contaminant management
  - Stable quality
# Contact Us

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<th>Products · Technologies</th>
<th>Inquiry of the products</th>
<th>TEL &amp; FAX</th>
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<tbody>
<tr>
<td><strong>Resins for Electronic Materials</strong></td>
<td>Composite Materials Group</td>
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Corporate R&D Department  
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