LORD® In-Mold Bonding (IMB™) Adhesive Technology is a ground-breaking innovation that offers the ability to bond and seal electronic assemblies, sensors, connectors and pins in the injection mold enabling greater design flexibility, increased manufacturing efficiencies, material cost savings and air/moisture/fluid sealing between different materials. IMB Adhesives are non-tacky polymer-based materials that, when applied to a rigid substrate, provide a structural bond to a thermoplastic or silicone which is formed under heat and pressure. This technology enables assemblies between plastics, silicones and metals to be made during the molding process.

LORD IMB™ adhesive systems do not require special surface preparation such as plasma or corona, eliminating the need for complicated surface pre-treatments, precise environments and difficult-to-control kinetics. Further, there are no moisture or atmosphere application limitations as with typical silane primers.

**APPLICATIONS**

- Bond and seal over-molded assemblies:
  - Electronic Components and Sensors
  - Electrical Connectors and Pins
  - Ignition Coils, Injectors, Pumps and Solenoids

**ADVANTAGES**

- **Design Flexibility**: Structural bonding of non-compatible materials during the molding process enables curved, thinner, lighter and new differentiated designs.

- **Manufacturing Efficiencies**: IMB increases throughput by 30% and eliminates secondary process costs associated with the application of PSA tapes and structural adhesives. Remove labor associated with assembling mechanical locking features like clips and screws.

- **Sealing Assemblies**: Maintain resistance to liquid or gas ingress/egress in a plastic or silicone to rigid substrate assembly at temperature and pressure over time.

- **Versatile and Easy-to-Use**: Ability to bond a wide variety of materials with one-component systems that apply easily by spray, brush, or dip methods without pot life issues associated with two-component systems.
COMPATIBLE MATERIALS

Molded Materials
- Liquid Silicone Rubber
- PC
- PC/ABS
- Nylon
- PBT
- TPSiV
- TPU
- PPSU
- PEEK / PAEK
- TPE

Substrates
- Aluminum
- Steel / Stainless Steel
- Magnesium
- Glass
- PC
- PEI
- Polyester
- PPSU
- Nylon

Many areas of active development are underway to expand to new materials combinations.

LORD IMB ADHESIVES

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>DESCRIPTION</th>
<th>APPEARANCE</th>
<th>TYPICAL VISCOSITY, CPS @ 25°C (77°F)</th>
<th>DENSITY RANGE, KG/M³ (LB/GAL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMB 1010</td>
<td>Designed for bonding thermoplastic polymers to metals and other rigid substrates (TPU, Nylon, PC, PC/ABS).</td>
<td>Clear to yellow liquid</td>
<td>100-200</td>
<td>910-950 (7.6-7.9)</td>
</tr>
<tr>
<td>IMB 1020</td>
<td>Designed to bond a wide range of thermoplastic polymers to stainless steel, other metals and rigid substrates (TPU, TPSiV).</td>
<td>Clear liquid</td>
<td>100-300</td>
<td>870-910 (7.3-7.6)</td>
</tr>
<tr>
<td>IMB 2000</td>
<td>Aqueous adhesive system designed for bonding thermoplastic materials to metals and other rigid substrates (SEBS, Nylon).</td>
<td>White liquid</td>
<td>20-400</td>
<td>946-979 (7.9-8.2)</td>
</tr>
<tr>
<td>IMB 2010</td>
<td>Aqueous adhesive designed for bonding thermoplastic elastomers such as polyurethanes, polyesters and TPSiV. It will also bond some engineering thermoplastics such as nylon and PC.</td>
<td>White liquid</td>
<td>200-600</td>
<td>1019-1066 (8.5-8.9)</td>
</tr>
<tr>
<td>IMB 3010</td>
<td>Designed for bonding addition-cured silicone rubber to a variety of thermoplastic and metal substrates, including PC, polyesters, stainless steel and aluminum, during the injection and/or compression molding process.</td>
<td>Milky Liquid</td>
<td>70-100</td>
<td>851-869 (7.1-7.25)</td>
</tr>
<tr>
<td>IMB 3020</td>
<td>Designed for bonding addition-cured silicone rubber to a variety of metal and compatible plastic substrates during the injection or compression molding process.</td>
<td>Milky Liquid</td>
<td>70-100</td>
<td>870-885 (7.26-7.38)</td>
</tr>
<tr>
<td>IMB 3030</td>
<td>Designed for bonding addition-cured silicone rubber to a variety of metal and compatible plastic substrates during the injection or compression molding process.</td>
<td>Milky Liquid</td>
<td>70-100</td>
<td>870-885 (7.26-7.38)</td>
</tr>
</tbody>
</table>

For more information about LORD IMB Adhesives, please contact Customer.Support@LORD.com or +1 800 ASK LORD