



## APPLICATION INSTRUCTIONS

for Biolink Adhesive Systems

As of: Mai 2021

### Temperature

As a general statement, the best temperature for bonding adhesive tapes is between +15°C and +30°C. Low temperature application is possible for modified adhesive systems, but there may be a compromise on the ultimate bond strength.

### Surface

The surfaces of the parts must be dry, clean and free of moisture and condensation. The surfaces must also be free of oil, fat, dust and other contaminants. Porous surfaces can be primed to ensure a uniform, stable surface.

### Cleaning

The cleaning of the surfaces has to be done with clean cloths together with suitable solvents like alcohol or ethers. To remove dust, oil, release agents and other contaminants you can for example use the following solvents: isopropanol-water mixture 50:50, heptane, ethanol, acetone, MEK or other suitable solvents that do not leave residue and do not attack the substrate to be bonded. The selected solvent must be checked thoroughly before being used and the safety in use of solvents should always be considered.

### Pressure

Adhesive tapes are pressure sensitive (PSA's). The initial application pressure is critical to the ultimate performance of the adhesive tape. The target application pressure is 10-15N/cm<sup>2</sup>, which is best provided by a roller or press. When application only by hand is possible, a firm even and overall pressure is essential and is best provided by use of an applicator or rubber blade 'squeegee'. Firmer adhesive classes (such as the pure acrylics) require more initial application pressure than soft ones.

The full bonding power of hard adhesives is attained between 24 & 72 hours, depending upon the substrates, application pressure and the application environment.

### Force and stress

Where possible, avoid leverage of the bonded components for as long as possible after assembly. For assembly and design purposes, shear and peel forces have to be evenly distributed across the whole of the bonded surface areas. During assembly, permanent shear loads should be avoided, as this will adversely affect the viscoelastic bonding (for example arched, curved or bowed surfaces should be mechanically clamped and held for the bond to be effective).

### Suitable materials

Typically, good adhesion can be attained on smooth surfaces. For rough surfaces, you need a thicker tape or alternate product format.

Good or easily bonded surfaces are: metals, high energy surfaces such as smooth wood, ABS, polycarbonate, PMMA, hard PVC, wood, stone and glass.

### **Critical materials**

Guidance should be sought for low energy surfaces, particularly plastics, where plasticisers may be present, which can adversely affect the bond. These critical surfaces such as polyethylene, polypropylene, rubbers, powder coats, silicones, polyurethane, Teflon, varnishes should be tested for performance and compatibility prior to specifications or recommendations for use are made.

### **Storage**

The storage of adhesive tapes should be at room or ambient temperature and at 50-70% relative humidity and out of direct sunlight. Extremes and fluctuations in storage temperature and humidity should be avoided.

### **Important information**

It is the user's responsibility to ensure the suitability and safety of Saint-Gobain products for all intended uses and that the materials to be used comply with all applicable regulatory requirements. Saint-Gobain assumes no responsibility for any product failures that occur due to misuse of the materials it provides arising out of the design, fabrication or application of the products into which the materials are incorporated.

### **Warranty**

For a period of 24 months, Saint-Gobain warrants this product(s) to be free from defects in manufacturing. The only obligation under any applicable product warranty will be to replace any portion proving defective, or at our option, to refund the purchase price thereof. Saint-Gobain disclaims all implied warranties of merchantability and fitness for a particular purpose.