Bonding & Sealing Solutions for Medical Mask

Opportunity

A medical manufacturer in China is currently using a local brand UV Acrylic for bonding highly plasticized PVC in the assembly of masks. The current UV Acrylic requires a long UV exposure time and is causing a high defect rate.

Substrates: PVC (Polyvinylchloride) || PVC (Polyvinylchloride)

Challenges

- Current adhesive requires a 12 second pre-cure, which is the ceiling in the manufacturing process.
- The high defect rate is caused by the UV Acrylic having an incomplete cure.

Solutions

Product(s) used: Loctite 3341

Dispense

Loctite Adhesive is dispensed onto the cushion during Assembly

Cure

New Cure time of 8 seconds; without a pre-cure step



Benefits

- Cycle time reduction from 12 seconds to 8 seconds, as well as eliminating the pre-cure step.
- Defect Rate reduction from 3.0% to 0.2%.





