

3M™ Plastic Bonding Adhesive 2665

For thin bond lines in lens/case assembly and more

- High tack beads
- Long open time

High tack beads with long open time for thin bond lines

3M™ Plastic Bonding Adhesive 2665 is a moisture-curing urethane that applies warm and sets like a hot melt adhesive, but with a long open time for easy assembly of parts requiring a thin bond line.

Lower overall assembly cost with improved efficiency, productivity, and yield

- High tack holds parts together for immediate handling and fast production.
- 1-4 minute open time allows initial repositioning even with thin bond lines that would otherwise cure too quickly for assembly.
- Low viscosity holds bead shape and size in small, defined areas.
- Single-component formulation eliminates potential inconsistencies of metering and mixing.
- 100% solids provides a low-VOC system with no drying equipment and attack on plastics.
- Bonds and seals simultaneously.



Beads smaller than 1 mm

High performance for lens/case and housing assembly in cell phones and notebooks, MP3 players, portable batteries, and other consumer electronics

- Thin, tough and flexible bond lines help improve fit, appearance, and reliability.
- Excellent high strength bonds for plastics and metals, dissimilar substrates, and even hard-to-bond plastics such as polycarbonate.
- No whitening, as often occurs with cyanoacrylate adhesives on plastic.
- No plastic cracking, as may occur with ultrasonic welding

3M™ Plastic Bonding Adhesive (PBA) 2665 compared to other adhesives/bonding solutions

Characteristic	3M™ Plastic Bonding Adhesive 2665	PSA Tapes	Ultrasonic Welding
Bond dissimilar plastics	Yes	Yes	No – Can only weld similar materials.
Bond very thin joints (<1 mm bond width)	Yes – bonds <1 mm	Can't bond thin joints – die cut design, insufficient strength.	Very difficult. Potential risk of damaging internal components.
Bond strength	Very strong even in small joints. Can withstand high impact cleavage force.	Weak bond, especially in very small joints. Not strong enough to withstand high impact cleavage force.	Very strong, but with thin plastic the welded strength is low.
Fills gaps caused by part to part variation	Yes, liquid fills gap easily.	No, tape does not fill these gaps.	Requires very good molding plastic tolerance to have complete seal.
Appearance of bonded edges	Very good	Good	Often has scratches on painted surface.
Complete seal	Yes	Difficult, depends on design.	Very difficult – depends on design.
Time from process design stage to mass production	Fast and easy.	Moderate, need to get die-cut design.	Long, need to make precise and expensive ultrasonic jigs.
Bonding curved surfaces	Yes	No	Not applicable.
Component damage (vibration)	None	None	Vibration damages internal components.
Die-cut inventory risk	None	Yes - when program hits EOL.	None
Total applied cost	Low	High	Low
Equipment cost	Low	None	Very expensive startup costs (jigs).

Assembly solutions to help improve your product and productivity

3M's assembly solutions go beyond the adhesive formulation. 3M applies technology and talent to help your bottom line. That's why you can look to 3M for help with application systems and methods to facilitate your production needs.

3M™ Plastic Bonding Adhesive 2665 in 30cc syringes can be readily integrated into automated production lines using a variety of heating/dispensing equipment. For example, the Nordson Unity™ IC30 System shown here precisely and automatically dispenses consistent bond lines fast enough to meet throughput requirements. This material is also available in 295 mL cartridges.

Accurately dispense PUR over extended work times

- <0.5 mm bead possible
- Consistent dispensing over the entire life of the cartridge
- Automatically handles change in viscosity to enable design flexibility

Automatic assembly of various electronic devices/applications

- Integrated controls
- Small footprint

Nordson's world class service and support

- Global sales and support
- Built on Nordson's history of technical and service excellence

3M applications engineering and support to get you up and running easily

3M adhesive systems specialists can work with you on systems integration, application equipment, and part design optimization such as illustrated here.



Nordson Unity™ IC30 System

Nordson Unity™ IC30 Dispensing System Featuring the MiniBlue™ Dispensing Gun

- Air-open/air-close module provides clean cutoff.
- Features the EasyOn™ module design for fast installation while maintaining z-axis position during cartridge change over.
- Fixed reduced cavity or removable Saturn® nozzle delivers excellent bead deposition.



Important Notice: Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use. Please consult the 3M product technical data sheet and Material Safety Data Sheet before use.

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