# **3M** Polyurethane Adhesive 6316/6316B

| chnical Data        | May, 2016  |
|---------------------|--|
| Product Description | 6316/6316B is 100% solid content, one part and moisture cured polyurethane adhesive. It features low viscosity, easy to work and great bonding performance to glass, plastics and metal. |
| Specific Features   | <ul> <li>Low viscosity, easy to operate</li> <li>Fast initial strength</li> <li>Longer open time</li> <li>Suitable for 0.5mm bonding width</li> </ul>                                    |
|                     | Great waterproof and airtight property   |

#### **Physical Properties**

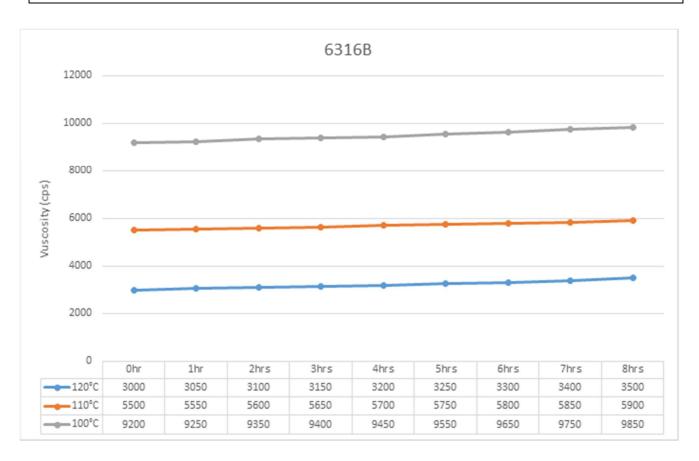
Note: The data are measured by 3M internal lab test method and environment, cannot act as product spec.

| Polyurethane Adhesive 6316/6316B |                     |  |  |  |
|----------------------------------|---------------------|--|--|--|
| Base                             | PU                  |  |  |  |
| Solid Content(%)                 | 100%                |  |  |  |
| Appearance                       | Off-white/Black     |  |  |  |
| Viscosity(cps)                   | 3,000cps (120°C)    |  |  |  |
| Open Time                        | 3mins ~4mins        |  |  |  |
| Hardness                         | Around 75 (Shore A) |  |  |  |

| Heating Temperature and Viscosity |                               |  |  |  |
|-----------------------------------|-------------------------------|--|--|--|
| Temperature                       | Viscosity(cps)                |  |  |  |
| 90°C                              | 12,000                        |  |  |  |
| 100°C                             | 7,500                         |  |  |  |
| 110°C                             | 4,500                         |  |  |  |
| 120°C                             | 3,000                         |  |  |  |
| 130°C                             | 1,500                         |  |  |  |
|                                   | Brookfield DV-E , #S27, 10rpm |  |  |  |

## Viscosity Change with Heating Time

Brookfield DV-E , #S27, 10rpm



### Performance

|             |                             |          | Stre    | ngth build-up  | ) with time, S  | Shear Force<br>(Kgf/cm²) |
|-------------|-----------------------------|----------|---------|----------------|-----------------|--------------------------|
| Substrate   | 5mins                       | 30mins   | 60mins  | 120mins        | 24hrs           | 72hrs                    |
| PC to PC    | 3                           | 5        | 9       | 16             | 44              | 46                       |
|             |                             |          |         |                | Glue Thickne    | ss : 0.15mm              |
|             |                             |          | AST     | √ D1002-05, te | esting speed is | s 50mm/min               |
|             |                             |          | Strengt | th Compariso   | n at Various    | Substrate                |
|             | (25°C 50%RH 24hrs, Kgf/cm²) |          |         |                |                 |                          |
| Substrate   | PC to PC                    | PC to Al | PC t    | o Glass        | Glass t         | o Al                     |
| Shear Force | 44                          | 37       | 4       | 1              | 2               | 3                        |

## Push Force

(25°C 50%RH 24hrs, Kgf/cm<sup>2</sup>)

| Substrate              | Glass to PC   |  |  |
|------------------------|---|--|--|
| Push Force             | 36  |  |  |
|                        |   |  |  |
| Instruction            | Please avoid to heat over 8 hours and make sure the outside environment |  |  |
|                        | is in open area   |  |  |
| Safety                 | Refer to MSDS   |  |  |
| Storage and Shelf life | 12 months at un-open under 16°C~27°C, 50%RH                             |  |  |

#### **3M** Industrial Adhesives and Tapes Division 3M Taiwan Ltd., 6F., No.95, Sec. 2, Dunhua S. Rd. Taipei 10682, Taiwan www.3M.com/adhesives