

8654C two-component polyurethane structural bonding adhesive has high bonding strength to aluminum, good toughness, and certain thermal conductivity. With a volume ratio of 1:1, it is easy to use. The product is resistant to low temperature and mildew, non-toxic, and non-corrosive, and has excellent impact resistance and durability.

Additionally, the product does not contain free TDI, and is safe and environmentally friendly.

### Typical applications

Cell-bottom case bonding and cell-cell bonding for new energy battery modules

### Properties before curing

	Typical value	Range
Appearance	Part A: Yellow viscous Part B: Blue viscous	
Chemical composition	Part A: Polyol Part B: Isocyanate prepolymer	
Viscosity (mPa·s)		
Brookfield DV-1	14# rotor, 100r/min	
	Part A: 30000	40000±15000
	Part B: 35000	40000±15000
Density (g/ml)	Part A: 1.24 Part B: 1.39	1.24±0.05 1.39±0.05
After mixing	1.31	≤1.35
Pot life (min)	Around 35	≥10
State after mixing	Green paste, with certain thixotropy	

### Properties after curing

Hardness (Shore D)	67	60-75
Thermal conductivity (W/m·K)	0.38	0.35-0.45
Shear strength (curing at 25±2°C for 7d) MPa		
	3003 Al/3003 Al 12.5	≥9
Tensile strength (curing at 25±2°C for 7d) MPa		
	3003 Al/3003 Al 12.0	≥9
High and low temperature cycles - 1000 cycles from -40°C to 85°C MPa		
	3003 Al/3003 Al 14.0	≥9.0
Double 85 test - Testing at 85%RH, 85°C for 1000h		
	3003 Al/3003 Al 15.5	≥9.0
Working temperature (°C)		-40-65

### Directions for use

- Clean-up: Clean up the surface to be bonded, making it clean and dry;
- Gluing: Prepare the glue as per the ratio of A:B=0.9:1(Wt)/1:1(V). It is recommended to use glue gun or other application tools to apply the glue. The product can be used after the not well mixed part at the front end is removed and the two components are visually inspected to be well mixed;
- Curing: Room temperature curing or heat curing.

### Cautions

- The optimal ambient temperature for application is 18-27°C. Unused glue shall be immediately sealed to avoid moisture absorption.
- Keep away from children for storage.
- The product contains isocyanates and irritates the skin and eyes. It is recommended to use the product in a well-ventilated place.
- If eyes or skin is accidentally exposed to the product, rinse immediately with water.
- Please consult the MSDS of the product for safety information.

### Storage

Store at 8-28°C in a cool and dry place. Shelf life is 6 months.

### Packing specification

400 ml/cartridge; 5 gallons/barrel; 55 gallons/barrel.

### Waste disposal

If not polluted by other substances, the waste can be stacked in landfill in principle and will not pollute water quality. Since the product can be burned, the waste can be disposed of in a waste incineration plant. Undoubtedly, it is necessary to abide by the environmental regulations of the local government.

### Health and safety information

Before operating the product, it is necessary to get familiar with its hazards, proper use and disposal, and other relevant information. The following information may be useful: Material Safety Data Sheets (MSDS) and product classification marks. For more detailed information, contact your sales representative or technical service representative.

Note:  
The data in this document were obtained under laboratory conditions. Due to differences in the operating environment, the user can refer to these data and operating conditions for analysis and testing. Huitian does not guarantee the sale of products or the use of the products under specific working conditions and does not accept any liability for direct, indirect or incidental damage. If users encounter any problems in the process of use, please contact the technical service department of Huitian New Material and all assistance will be provided.