

# DUV-SE500

## UV Adhesive



DUV-SE500 is a UV-curable adhesive that features outstanding stickiness and adhesiveness for glass. This one-component non-solvent-based product shows superior elasticity along with superior penetrance, turbidity, and yellowing resistance. It is suitable for manufacturing of explosion-proof transparent displays with outstanding weather resistance.

Usage

Adhesive for manufacturing transparent display products made of glass

### Specification

Paint type	Non-solvent-based UV adhesive		
Product features	<ol style="list-style-type: none"><li>1. It is a non-solvent-based adhesive that does not require solvent drying process.</li><li>2. It features outstanding adhesiveness for glass.</li><li>3. It shows very little shrinkage during UV curing.</li><li>4. It features outstanding yellowing resistance.</li><li>5. It has low viscosity, resulting in outstanding penetrance and workability.</li></ol>		
Solid content (%)	> 99	Exterior	Transparent liquid
Viscosity (vibration viscosity, 25 °C)	1.5 - 1.7	Specific gravity (25 °C)	0.98 ± 0.03
IR drying conditions	Not required	Curing conditions	5,000 - 7,00mJ/cm <sup>2</sup> , combination of metal lamp and mercury lamp
Thinner/Available solvent	MEK, MIBK, ethyl acetate, butyl acetate, etc. (Whitening effect may occur on the cured surface when solvent is mixed with the product.)		
Storage conditions	Store in a shaded indoor space with sufficient ventilation.	Shelf life	12 months

### Product Properties (Physical Property Data)

Penetrance *	> 93
Adhesiveness **	0.6 N/mm <sup>2</sup>
Elongation	> 300 %

\*80 - 100 μm coating on 188 μm PET film

\*\* Glass-glass adhesive surface approx. 0.25 cm<sup>2</sup>, UTM test speed = 300 mm/min

### How to Use

How to Use	<ol style="list-style-type: none"><li>1. Cleaning of target surface: When surface cleaning is necessary, use an appropriate solvent to remove oil and debris on the surface.</li><li>2. Static electricity and dust removal: Treat the surface using an air shower or ionizer to prevent dust collection or static electricity on the surface.</li><li>3. Residual contaminants may result in defective film exterior and adhesion.</li><li>4. UV-curing conditions A UV lamp is either an electrode type or no electrode type. For an electrode-type UV lamp, a metal halide lamp or a high-voltage mercury lamp is recommended. More superior surface and film exterior can be achieved when nitrogen reflux is possible within the UV curing device. If the light is not intense enough, surface tack may occur or steaming or defective adhesion may result at high temperature.</li></ol>
Note	<ol style="list-style-type: none"><li>1. It contains substances harmful to skin and body. Wear a mask and protective gears prior to work. (For more details, refer to the MSDS.)</li><li>2. The product may deteriorate if exposed to natural light including sunlight, UV light (UV lamp), and work light (fluorescent light and incandescent light).</li><li>3. There is a possibility of deterioration or volume expansion when stored at above 30 °C for a long period of time.</li><li>4. Please use the product within its shelf life (12 months from the manufacturing date). There is a possibility of deterioration, precipitation, etc. when the product is stored for a long period of time. Please inquire the customer service center if you want to use a product that has been stored for a long time.</li></ol>

► The data shown above were obtained under the laboratory conditions, and the product properties may vary depending on work method and circumstances. Please refer to the property data listed above only as reference.