

## DVD Adhesives

### XD 4761

### UV curing acrylic adhesive

#### Key properties

- Suitable for DVD 9 (Silver alloy: Aluminium)
- Suitable for DVD 9 (Silver alloy: Silver alloy), DVD 9 (Gold: Aluminium), and DVD 9 (Silicon:Aluminium)
- Suitable for DVD 5, DVD 10
- Low viscosity
- All formats pass 80<sup>0</sup>C / 95%RH / 96 hours climate test
- Very fast cure under UV light

#### Typical product data

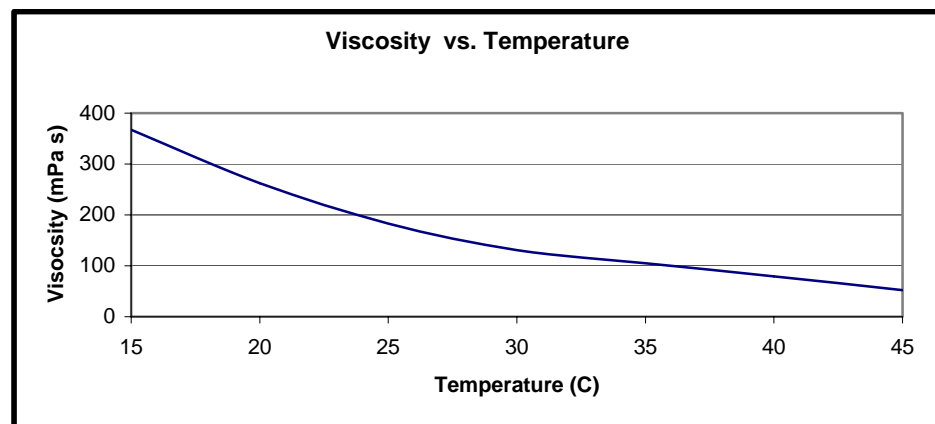
Property	XD 4761
Appearance	Clear, light yellow, liquid
Viscosity at 25°C	ca. 190 mPas
Refractive index (25°C)	ca. 1.49

#### Cured strength data

Polycarbonate: Polycarbonate	7.6 N/mm <sup>2</sup>
Polycarbonate: Aluminium	3.3 N/mm <sup>2</sup>
Aluminium: Aluminium	2.3 N/mm <sup>2</sup>
Silver Alloy: Aluminium	2.4 N/mm <sup>2</sup>
Silver Alloy: Silver Alloy	2.4 N/mm <sup>2</sup>

\* Substrates are prepared by wiping with isopropanol, to remove any residues prior to bonding. All substrates are DVD polycarbonate based sputtered with the designated layer. All the following properties were determined after passing under a medium pressure mercury lamp. All results are for lap shear specimens with a 12.5mm x 25mm bonded overlap and uncontrolled bond line thickness of 50-150 microns. This data is provided solely as technical information and does not constitute a product specification.

#### Processing



XD 4761 will cure readily with most lamp types; the cure is dependant on the adhesive layer thickness, the output of the light source and distance of the adhesive from the lamp, as well as the substrate.

Dose of UV light	200 mJ/cm <sup>2</sup>
Time for full through cure	0.5 sec
Total dose required for full cure	50 mJ/cm <sup>2</sup>
Time required for surface cure	1.0 sec

## Climate Data

### DVD 9 (Silver Alloy: Aluminium) 80°C / 95%RH / 96 hours

System Jitter (%)	Before Climate Ageing		After Climate Ageing		Delta	
	Layer 0	Layer 1	Layer 0	Layer 1	Layer 0	Layer 1
Radii						
24 nm	4.7	5.7	5.4	6.3	0.7	0.6
32 nm	4.5	5.7	5.3	6.5	0.8	0.8
40 nm	4.7	6.2	5.5	7.0	0.8	0.8
49 nm	5.2	6.7	5.9	7.4	0.7	0.7
57 nm	5.7	7.5	5.9	7.6	0.2	0.1
<b>PI Errors</b>						
24 nm	28	22	44	79	16	57
32 nm	16	12	16	66	0	54
40 nm	12	25	13	54	1	29
49 nm	9	42	9	45	0	3
57 nm	10	24	12	28	2	4

*This data is provided solely as technical information and does not constitute a product specification.*

## Storage

XD 4761 can be stored for up to 1 year at 6 - 18 °C in the original sealed containers. The expiry date is indicated on the label.

## Handling precautions

### Caution

Our products are generally quite harmless to handle provided that certain precautions normally taken when handling chemicals are observed. The uncured materials must not, for instance, be allowed to come into contact with foodstuffs or food utensils, and measures should be taken to prevent the uncured materials from coming in contact with the skin, since people with particularly sensitive skin may be affected. The wearing of impervious rubber or plastic gloves will normally be necessary; likewise the use of eye protection. The skin should be thoroughly cleansed at the end of each working period by washing with soap and warm water. The use of solvents is to be avoided. Disposable paper - not cloth towels - should be used to dry the skin. Adequate ventilation of the working area is recommended. These precautions are described in greater detail in the Material Safety Data sheets for the individual products and should be referred to for fuller information.

## Huntsman Advanced Materials

All recommendations for the use of our products, whether given by us in writing, verbally, or to be implied from the results of tests carried out by us, are based on the current state of our knowledge. Notwithstanding any such recommendations the Buyer shall remain responsible for satisfying himself that the products as supplied by us are suitable for his intended process or purpose. Since we cannot control the application, use or processing of the products, we cannot accept responsibility therefor. The Buyer shall ensure that the intended use of the products will not infringe any third party's intellectual property rights. We warrant that our products are free from defects in accordance with and subject to our general conditions of supply.

Duxford, Cambridge  
England CB2 4QA

Tel: +44 (0) 1223 832121  
Fax: +44 (0) 1223 493322  
www.araldite.com

© 2004 Huntsman Advanced Materials (Switzerland) GmbH  
© Araldite is a registered trademark of Huntsman LLC or an affiliate thereof in one or more, but not all, countries.