



## BD-218

### UV-curable 1-Resin 2P for BD Dual Layer Photo Replication Applications

#### Features

- Excellent replication characteristic
- High Tg
- UV-curable
- Excellent adhesion to metal and good release from plastic stamper
- Extremely low peeling force
- Low viscosity
- Spin-coatable

#### Description

- UV-curable acrylate resin

#### APPLICATIONS

Multi-layers photo replicating resin for optical disc applications.

#### TYPICAL PROPERTIES

##### Before curing: liquid

Viscosity (cps, 25 °C)	380 – 420
Storage (°C)	15 – 25
Shelf life (15 - 25 °C)	6 months
Pot life (15 - 25 °C)	3 months

##### After curing: cured film

Outgas, weight % (125°C, 120 hr, air)	0.02
Water absorption (% , 100 °C until saturation)	0.3
Shrinkage (%)	3
Hardness – Shore D	95
Glass transition temperature (DMA, °C)	120
Refractive index of cured film (25°C) @ 589 nm	1.506

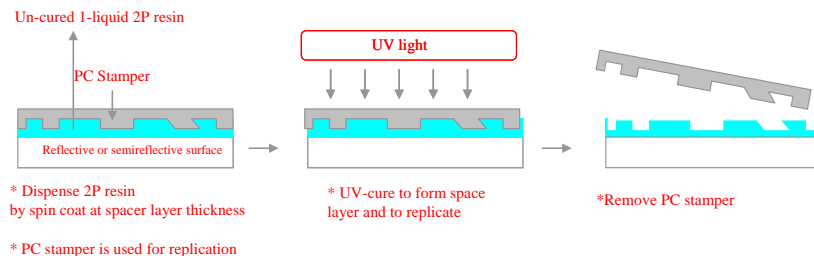
##### Physical properties tested at 25°C, 50% RH (ASTM D638)

Tensile strength, MPa	50
Elongation (%)	20
Modulus, MPa	1,900

##### UV curing conditions

UV dose (mJ/cm <sup>2</sup> in nitrogen)	>100
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\*\*\*A light source producing 250 to 400 nm is best match for this resin. Cure speed or tack free time depends on the intensity of the UV source, thickness of 2P resin layer, and transmission of the substrates.



#### PACKAGING

This product is packaged in 10 Kg or 18 Kg UV-block plastic containers.

#### STORAGE

This product is light sensitive. It should be stored in the original container in a cool and dry place at or below 25 °C (77 °F). It should be kept away from heat and light to obtain the maximum shelf life. Improper storage may result in gelation of the product.

#### SAFETY AND HANDLING

The un-cured adhesive can be cleaned from apparatus with isopropyl alcohol (IPA), methyl ethyl ketone (MEK), or commercial alcohol based cleaning solution. Use caution in handling this material. Avoid direct skin and eye contact. Use only in well ventilated areas. Use protective clothing, **gloves and safety goggles**. Read [Material Safety Data Sheet](#) before handling. The information presented here represents our best available information and is believed to be reliable, but it and does not constitute any guarantee or warranty. Inasmuch as Addison Clear Wave has no control over the exact manner in which others may use this information, it does not guarantee the results to be obtained. Nor does the company make any expressed or implied warranty of merchantability, or fitness for a particular purpose concerning the effects or results of such use. Purchasers are further responsible for determining the suitability of the product for its intended use and the appropriate manner of utilizing the production processes and applications so as to ensure safety, quality and effectiveness. Addison Clear Wave makes no warranties and assumes no liability in connection with the use or inability to use this product.