



# IP-158

## UV-curable Imprint Resin for Photo Replication Applications

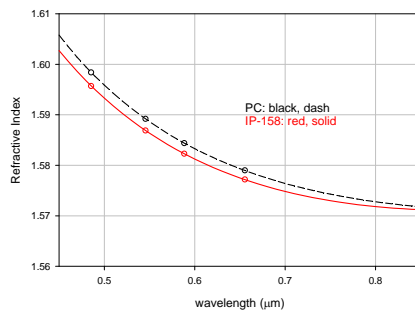
### Features

- Excellent replication characteristic
- UV-curable
- Low viscosity
- Spin-coatable
- High refractive index

### Description

- UV-curable acrylate resin

RI from 450 nm to 830 nm of IP-158 and polycarbonate (PC)



### APPLICATIONS

High refractive index imprint material for photo-replication.

### TYPICAL PROPERTIES

Before curing: liquid

Viscosity (cps, 25 °C)	420 – 500
Storage (°C)	15 – 25
Shelf life (15 - 25 °C)	6 months
Pot life (15 - 25 °C)	3 months

After curing: cured film

Refractive index of cured film (25°C)  
@ 589 nm (D) 1.584

Shrinkage (%) 3

Hardness – Shore D 80

Glass transition temperature (DMA, °C) 70

UV curing conditions

UV dose (mJ/cm<sup>2</sup> in nitrogen) >100

\*\*\*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 imprint 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.

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