

DATA SHEET provisional

JET-144-xp1: Inkjet Compatible Low RI Optical Material

JET-144 is a low viscosity low refractive index UV curable coating suitable for ink jet applications. Surface tension and viscosity are compatible with some widely used piezoelectric DOD print-heads. The index is 1.439 at 1550 nm.

Properties

	Liquid state
RI liquid at 589 nm	1.393
Density, g/cm ³	1.26
Viscosity, cps @ 25°C	15.3
Surface tension, dyne/cm	25.5
color	Clear, slight yellowish
	Cured state
RI cured at 589 nm	1.447
RI cured at 1550 nm, estimated	1.439
Minimum Curing Energy (mercury lamp)	0.3 J/cm2
Density, g/cm ³	1.37
Adhesion to glass	Good
Surface cure	Good (non tacky)
Mechanical appearance	Flexible coating
Lowest boiling point component/ % in formulation	200°C/8%

The product is supplied pre-filtered to below 1 micron particles.

Storage

- 1. Avoid unnecessary exposure to ambient light.
- 2. The shelf life is 12 months in sealed bottles.

Application

Curing can be achieved by any source of UV at 300-400nm under inert conditions. A dose of 500-1000 mJ/cm² is necessary. Although inert atmosphere is preferred, curing in air is also suitable.

Keep the bottle closed in all times when not in use. The material is sensitive to moisture. Absorption of moisture may cause haze.

Safety: Refer to the SDS

Note: The above information is believed to be reliable, but it is not to be taken as a representation, warrantee or guarantee. Customers should perform their own QC, QA and evaluation tests.

Updated: June 18, 2020