

Preliminary Product Information Sheet

EPO-TEK® UJ1190 (formerly 88-190A)

Note: These are typical properties to be used as a guide only, not a specification. Data below is not guaranteed. Different batches, conditions and applications yield differing results.

Date: September 2017 **Rev:** IV
Material Description: EPO-TEK® UJ1190 is a clear, UV curable adhesive.
Number of Components: Single
Mix Ratio by Weight: N/A
Specific Gravity: 1.17
Pot Life: N/A
Shelf Life: One year at room temperature

Recommended Cure	
Iron-Doped Mercury Flood Lamp	> 60 sec. <i>100 mW/cm² @ 240-365 nm</i>
Alternative Cures*	
Iron-Doped Mercury Spot Lamp	> 15 min.
365nm LED Flood Lamp	> 10 min.
Pulsed Mercury Lamp	> 3 min.
UV Cure is complete after 24 hours from UV Exposure	
* Contact Technical Services for application-specific variations	

NOTES:

- Container(s) should be kept closed when not in use.
- Filled systems should be stirred thoroughly before mixing and prior to use.
- Performance properties (rheology, conductivity, others) of the Products may vary from those stated on the data sheet when bi-pak/syringe packaging or post-processing of any kind is performed. Epoxy's warranties shall not apply to any products that have been reprocessed or repackaged from Epoxy's delivered status/container into any other containers of any kind, including but not limited to syringes, bi-paks, cartridges, pouches, tubes, capsules, films or other packages..
- Thermal post-cure beneficial - contact techserv@epotek.com for recommendations.

MATERIAL CHARACTERISTICS: Cure Condition: Varies as required

PHYSICAL PROPERTIES:	
Color (before cure):	Pale yellow
Consistency:	Pourable liquid
Viscosity (23°C) @ 100 rpm:	501 cPs
Thixotropic Index:	N/A
Glass Transition Temp:	100
Coefficient of Thermal Expansion (CTE):	
Below Tg:	68 x 10 ⁻⁶ in/in°C
Above Tg:	153 x 10 ⁻⁶ in/in°C
Shore D Hardness:	80
Die Shear:	
UV Cure	13.4 Kg 4,765.0 psi
UV Cure + 23°C/24 hours	24.5 Kg 8,712.2 psi
UV Cure + 80°C/1 hour	25.5 Kg 9,067.8 psi
UV Cure + 120°C/1 hour	25.6 Kg 9,103.4 psi
UV Cure + 150°C/1 hour	30.1 Kg 10,703.6 psi
Degradation Temp:	401 °C
Weight Loss:	
@ 200°C	0.04 %
@ 250°C	0.11 %
@ 300°C	0.57 %
Suggested Operating Temperature:	< 250 °C (Intermittent)

OPTICAL PROPERTIES @ 23°C:	
Spectral Transmission:	≥ 94% @ 520-1,560 nm ≥ 80% @ 380-2,440 nm
Refractive Index (uncured):	1.4993 @ 589 nm

The data above is INITIAL only - it may be changed at anytime, for any reason without notice to anyone. It is provided only as a guide for evaluation/consideration.

*These material characteristics are typical properties that are based on a limited number of samples/batches. All properties are based on the cure indicated above. Some properties may vary as manufactured quantities are scaled up to commercialized production levels.