

EPO-TEK<sup>®</sup> O205NC **Technical Data Sheet** For Reference Only Fast Setting, Optical Epoxy

Date: November 2023 Rev: Ш Two No. of Components: Mix Ratio by Weight: 1:1Specific Gravity: Part A: 1.16 Part B: 1.14 Pot Life: < 5 Minutes Shelf Life- Bulk: 1 year at room temperature

Recommended Cure: 23°C / 2 Hours

Handling Time: 15-20 Minutes

## 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 product 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.

• TOTAL MASS SHOULD NOT EXCEED 25 GRAMS

Product Description: EPO-TEK® O205NC is a two component, fast-gelling, room temperature curing epoxy, designed for electronic, optical, and general applications.

**Typical Properties:** Cure condition: Varies as required Different batches, conditions & applications yield differing results. Data below is not guaranteed. To be used as a guide only, not as a specification. \* denotes test on lot acceptance basis

PHYSICAL PROPERTIES:		
* Color (before cure):	Part A: Clear/Co	lorless Part B: Clear/Colorless
* Consistency:	Pourable liquid	
* Viscosity (23°C) @ 20 rpm (Typical):	12,000	cPs
Thixotropic Index:	N/A	
* Glass Transition Temp:	31	°C (Dynamic Cure: 20-200°C/ISO 25 Min; Ramp -10-200°C @20°C/Min)
Coefficient of Thermal Expansion (CTE):		
Below Tg:	60	x 10 <sup>-6</sup> in/in°C
Shore D Hardness:	86	
Lap Shear @ 23°C:	1,500	psi
Suggested Operating Temperature:	< 130	°C (Intermittent)
* Particle Size:	N/A	
ELECTRICAL AND THERMAL PROPERTIES:		
Thermal Conductivity:	N/A	
Volume Resistivity @ 23°C:	$\geq 2 \times 10^{14}$	Ohm-cm
Dielectric Constant (1KHz):	4.00	
Dissipation Factor (1KHz):	0.017	

www.epotek.com



## **EPO-TEK® O205NC Advantages & Suggested Application Notes:**

- Due to its versatility, it may be used to adhere, seal, pot or encapsulate.
- Allows for % transmission in VIS and NIR range. It can be used as an adhesive in the optical pathway of light.
- Convenient and easy to use 1:1 mix ratio allows for hand, meter mix, or specialty packaging.
- Meets UL94HB requirements
- Suggested Applications:
  - Field Assembly: mix and cure in the field. Fast gelling and curing in 2-3 hours is accomplished.
  - Electronics: rapid prototyping of parts with fast curing epoxy no need for oven cycle times.
  - Optics: active alignment of optics such as lenses, prisms, diodes, filters, etc. to opto-circuit.
  - Fiber Optics: "field curing" or field assembly of connectors and couplers; also suggested for fiber optic splicing.
  - General: arts and crafts repair, restoration, and hobbyists.