

Product Data Sheet



RoHS/WEEE, REACH,
and Halogen Free



Product

Alignrite 50823/24-1

This UV cure acrylated urethane oligomer based adhesive has been formulated for the alignment of LED's, VCSEL's, and the fine alignment of precision optics. It has extremely low shrinkage during cure and its low CTE keeps the products from moving during UV cure and thermal cycling. This material is 100% solids (***NO VOC's**) and contains no reactive diluents that can be trapped under the positioned devices. Adhesion to glass, Al₂O₃, AlN, PCB substrates, metalized substrates, and gold or nickel plated headers is extremely good.

MCT Alignrite **50823/24-1 cures to a hard film but will not become brittle. It has a small amount of resiliency that provides strain relief from vibrations or temperature extremes. This toughness insures long-term performance of the bond.

Properties

| | |
|-------------------------------|----------------------------|
| Color | Off white |
| Solids (%) | 100 |
| **Filler | /23 = 40% & /24= 60% |
| Filler Type | Proprietary – non-reactive |
| Viscosity at 25°C (cps) ` | 120,000 – 127,000 cps |
| Elongation at Failure (%) | 6.0 |
| Modulus of Elasticity (psi) | >90,000 |
| Tensile Strength (psi) | >4,000 |
| Linear Shrinkage (%) | 0.068 |
| Hardness - Shore D | 75-80 |
| Useful Temperature Range (°C) | -50 - +125 |
| Tg (°C) | 130 |
| Moisture Absorption (%) @25°C | 2.0 |



Shelf life of the adhesive is at least 12 months from the date of shipment if stored in a cool (5-22° C), dark place in the original container. If refrigerated, allow the adhesive to come to room temperature prior to use.

*(**VOC** = Volatile Organic Compounds)

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