



**PACKAGING ADHESIVE/SEALANT
DESICCANT FILLED ADHESIVE**

RJR's Desiccant filled adhesive is designed for general-purpose use in protecting electronic packages from moisture condensation in the package interior. It is ideal for use in mechanized sealing systems although specially designed manual clipping processes can be used. It is pre-applied and cured in the RJR manufacturing process at any convenient location inside the package cavity, including the lid. Activation is accomplished in an initial heat soak just prior to sealing. This is accomplished automatically in either an ITS or AITS sealing system. However, a special drying step is required for clip and bake sealing processes.

TYPICAL PROPERTIES

Max operating temperature (continuous), °C	160-165°C
Outgassing	0.15%TML, 0.003%CVC
Moisture Absorption (24 hr. @ 50 C./90%RH)	5.5%
Total ionic content (specific electrical conductance), mS/m	NA
Extractable Ions, ppm	<10
Hydrolysable chloride content, ppm (MIL-STD 883H Method 5011.5)	NA
Ultimate Tg by DSC, °C	105
Modulus, psi	480,000
CTE, ppm/°C	25
Dielectric constant (@ 1MHz)	NA
Volume resistivity, Ohm-cm	NA
Thermal conductivity, W/m-k	0.6 – 0.7

TYPICAL SEALED PACKAGE PERFORMANCE PROPERTIES

Reflow temperature, °C	NA
Lap shear strength (gold/ceramic @ 25°C), psi	1200

**These values may vary depending upon the materials to which the epoxy is adhered. All above data is based on sealed packages consisting of a ceramic header and a ceramic lid.*

DESSICANT ACTIVATION AND PACKAGE SEALING

Part of the installation process for the Desiccant involves a curing process for the binder compound. In special cases this product may be Beta staged for special performance requirements. However, the sealing and curing practice of the package sealant MUST include a minimum 2-minute drying step for the desiccant, and package closure must capture the dry desiccant within a few seconds for optimum results. The package sealing profile will depend upon the designated sealing adhesive chosen. Most parts can be sealed and cured in a one-step cycle of 60 minutes at 160°C under 5psi of pressure, WITH THE ADDITION OF A MINIMUM 2 MINUTE DYRING STEP TO EXPELL MOISTURE FROM THE DESICCANT BEFORE CLOSURE. For alternate curing practices or automated procedures, please consult RJR Technologies Customer Service. (Phone # 510-638-5901 or FAX # 510-638-5958)

STORAGE AND HANDLING

Keep parts with the material in vacuum sealed bag with dry-packs at 3-8°C and <50% RH. Shelf life of the material when stored under refrigerated conditions (3-8°C) is 6 months from the date of manufacture. Room temperature and frozen storage conditions may be appropriate for some applications. Please consult RJR Technolgies Customer Service for specific storage options.

REGULATORY

This product is RoHS compliant.



NOTICE

This data is provided for guideline purposes. No warranty is made on the actual use. Customers should perform their own tests and qualifications.