

## **Technical Data Sheet**

# DOWSIL™ JCR 6126 WC Encapsulant

Two-part, 10:1 mix ratio translucent, medium-modulus LED encapsulant

# Features & Benefits

- Thixotropic
- Very long working time
- Optically clear
- Controlled flow to keep material where dispensed
- Long rework and fixturing time
- Seal and protect LEDs

## **Applications**

- Compatible with commercially available equipment and industry standard processes
- Dispensed or molded depending on the product and application.

# Typical Properties

Specification Writers: These values are not intended for use in preparing specifications.

Property	Unit	Result	
Viscosity (Mixed)	сР	86400	
	mPa-sec	86400	
	Pa-sec	86.4	
Viscosity after 24 hours	сР	91800	
	mPa-sec	91800	
	Pa-sec	91.8	
Specific Gravity (Uncured Part A or Base)		1.03	
Shelf Life @ 32°C	months	9	
Heat Cure Time @ 150°C	minutes	60	
Durometer Shore A (JIS)		26	
Dielectric Strength	volts/mil	600	
	kV/mm	24	
Dielectric Constant at 1 MHz		2.8	
Dissipation Factor at 1 MHz		0.0009	
Volume Resistivity	ohm*cm	3.4E15	

## Typical Properties (Cont.)

Property	Unit	Result	
Impurity (Na+)	ppm	0.15	
Impurity (K+)	ppm	0.23	
Impurity (CI-)	ppm	0.17	
Refractive Index @ 632.8 nm		1.40	
Refractive Index @ 1321 nm		1.39	
Refractive Index @ 1554 nm		1.39	

## Description

Dow silicone encapsulants such as DOWSIL™ JCR 6126 WC Encapsulant are designed to meet the key criteria for the micro- and optoelectronic packaging industry, including excellent adhesion, high purity, moisture resistance and thermal and electrical stability. With their low Young's modulus, these materials can absorb the stress caused by CTE mismatches inside the package, protecting the chip and the bonding wires.

#### How To Use

Dow encapsulants are compatible with commercially available equipment and industry standard processes. The encapsulants can be dispensed, printed or liquid injection molded. Full cure to achieve final properties can be achieved in standard forced-air convection ovens or many other oven configurations.

## Compatibility

Certain materials, chemicals, curing agents and plasticizers can inhibit the cure of addition cure adhesives. Most notable of these include: organotin and other organometallic compounds, silicone rubber containing organotin catalyst, sulfur, polysulfides, polysulfones or other sulfur containing materials, unsaturated hydrocarbon plasiticizers, and some solder flux residues. If a substrate or material is questionable with respect to potentially causing inhibition of cure, it is recommended that a small scale compatibility test be run to ascertain suitability in a given application. The presence of liquid or uncured product at the interface between the questionable substrate and the cured gel indicates incompatibility and inhibition of cure.

# Usable Life And Storage

Shelf life is indicated by the "Use By" date found on the product label. Check the product label for specific storage conditions (one part products require cold storage). One-part products produced in Japan for export are shipped using dry ice. One-part products produced in the United States are shipped using blue ice.

## Handling Precautions

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE SAFETY DATA SHEET IS AVAILABLE ON THE DOW WEBSITE AT WWW.CONSUMER.DOW.COM, OR FROM YOUR DOW SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CUSTOMER SERVICE.

### Limitations

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

Health And Environmental Information To support customers in their product safety needs, Dow has an extensive Product Stewardship organization and a team of product safety and regulatory compliance specialists available in each area.

For further information, please see our website, www.consumer.dow.com or consult your local Dow representative.

http://www.consumer.dow.com

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