



KO1095™

January 2009

PRODUCT DESCRIPTION

KO1095™ provides the following product characteristics:

Technology	Silver Filled
Appearance	Silver
Components	One component - requires no mixing
Cure	Heat cure
Application	Die attach

KO1095™ is a silver -filled conductive adhesive for attachment of integrated circuits and components to leadframes. The material is a high purity epoxy with excellent interfacial adhesion strength to a variety of metal and ceramic surfaces. KO1095™ can be high speed dispensed and cured in a conventional oven, or on a snap cure oven.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Specific Gravity @ 25 °C	3.0
Viscosity, Brookfield - RVT, 25 °C, mPa·s (cP):	
Spindle TB, speed 5 rpm, Helipath	52,000
Thixotropic Index (1:10 rpm)	5.8
Pot Life @ 25 °C, hours	5
Shelf Life @ -40°C, months	12
Ionic Contaminants, ppm:	
Na+, K+	≤10.0
Ionic Contaminants, ppm:	
Cl-, F-	≤10.0

Flash Point - See MSDS

TYPICAL CURING PERFORMANCE

KO1095™ is supplied in syringes and should be stored at -40°C. KO1095™ can be cured using a variety of cure schedules, depending on the specific cure equipment.

Cure Schedule

Conventional Oven	30 minutes @ 165 °C
Snap Cure Oven	5 minutes @ 200 °C

TYPICAL PROPERTIES OF CURED MATERIAL

Cured for @ 25 °C

Physical Properties:

Coefficient of Thermal Expansion TMA:	
alpha1, ppm/°C	51
alpha2, ppm/°C	151
Thermal Conductivity, W/mk	2.1
Glass Transition Temperature (Tg) °C	91
DMA modulus @ 25°C, GPa	6.4
DMA modulus @ 25°C, psi	14,500

Electrical Properties:

Volume Resistivity, Ω·cm	0.001
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TYPICAL PERFORMANCE OF CURED MATERIAL

Adhesive Properties

Miscellaneous

Die Shear Strength:	
(100 mil ²) kg-f	>30.0
Si to Ag plated Cu @ 25 °C	

GENERAL INFORMATION

For safe handling information on this product, consult the Material Safety Data Sheet, (MSDS).

Not for product specifications

The technical data contained herein are intended as reference only. Please contact your local quality department for assistance and recommendations on specifications for this product.

Storage

Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.

Optimal Storage: -40 °C. Storage below minus (-)40 °C or greater than minus (-)40 °C can adversely affect product properties.

Material removed from containers may be contaminated during use. Do not return product to the original container. Henkel Corporation cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact your local Technical Service Center or Customer Service Representative.

Conversions

(°C x 1.8) + 32 = °F
kV/mm x 25.4 = V/mil
mm / 25.4 = inches
N x 0.225 = lb
N/mm x 5.71 = lb/in
N/mm ² x 145 = psi
MPa x 145 = psi
N·m x 8.851 = lb·in
N·m x 0.738 = lb·ft
N·mm x 0.142 = oz·in
mPa·s = cP

Note

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Reference 0.1