



TRA-DUCT 2958

June 2010

PRODUCT DESCRIPTION

TRA-DUCT 2958 provides the following product characteristics:

Technology	Epoxy
Appearance	Silver
Cure	Heat cure
Product Benefits	<ul style="list-style-type: none"> • Snap curable • Thermally conductive • Electrically conductive • Long pot life • Screen printable
Mix Ratio, by weight - Resin : Hardener	100 : 6
Typical Assembly Applications	Chip bonding, Electrical modules, Printed circuitry, Wave guides and High frequency shields
Operating Temperature	-60 to 175 °C
Application	Bonding or Sealing

TRA-DUCT 2958 is a two-part, smooth paste of specially refined and processed epoxy and silver components, recommended for electronic, microelectronic and die-attach bonding and sealing applications that require superior electrical and mechanical properties. It is free of contaminating solvents and additives and develops strong durable seals and coatings.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Mixed Viscosity, cps @ 25 °C	40,000
Thixotropic Index (5/50 rpm)	2.9
Specific Gravity, mixed	2.65
Reactive solids contents, %	100
Pot life, hours	4

Flash Point - See MSDS

TYPICAL CURING PERFORMANCE

Cure Schedule

15 minutes @ 100°C or
5 minutes @ 125°C or
2 minutes @ 150°C

The above cure profile is a guideline recommendation. Cure conditions (time and temperature) may vary based on customers' experience and their application requirements, as well as customer curing equipment, oven loading and actual oven temperatures.

TYPICAL PROPERTIES OF CURED MATERIAL

Physical Properties:

Coefficient of Thermal Expansion, cm/cm/°C	4.9×10 ⁻⁰⁵
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Glass Transition Temperature (T _g), °C	92
Thermal Conductivity, W/mk	1.50×10 ⁰⁰
Hardness, Shore D	80

Electrical Properties:

Volume Resistivity, ohms-cm:	
2 minutes @ 150°C	0.0005
5 minutes @ 125°C	0.0003

TYPICAL PERFORMANCE OF CURED MATERIAL

Lap Shear Strength :

Aluminum:	
Aged @ 150 °C for 2 minutes	N/mm ² 7 (psi) (1,000)
Aged @ 125 °C for 5 minutes	N/mm ² 7 (psi) (1,000)

GENERAL INFORMATION

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

DIRECTIONS FOR USE

1. Carefully clean and dry all surfaces to be bonded.
2. Remove clamp and thoroughly mix the TRA-DUCT 2958 epoxy adhesive system components in the handy BIPAX mixing-dispenser package until color is uniform throughout.
3. Apply this completely mixed adhesive to the prepared surfaces, and gently press these surfaces together. Contact pressure is adequate for strong, reliable bonds; however, maintain contact until adhesive is completely cured.

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: 27 °C

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

$$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$$

$$\text{kV/mm} \times 25.4 = \text{V/mil}$$

$$\text{mm} / 25.4 = \text{inches}$$

$$\text{N} \times 0.225 = \text{lb}$$

$$\text{N/mm} \times 5.71 = \text{lb/in}$$

$$\text{N/mm}^2 \times 145 = \text{psi}$$

$$\text{MPa} \times 145 = \text{psi}$$

$$\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$$

$$\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$$

$$\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$$

$$\text{mPa}\cdot\text{s} = \text{cP}$$

Note

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Reference 0.2