APTEK LABORATORIES, INC.
ISO 9001 / AS9100 Certified

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TECHNICAL DATA & INFORMATION

DIS-A-PASTE® 2716-A/B

- Thermally conductive, silicone potting compound
- Re-enterable for repairability
- Wide operating temperature range (-100°C to +260°C)

PRODUCT DESCRIPTION

DIS-A-PASTE 2716-A/B is a two component, filled, thermally conductive potting compound. It is designed for the potting and encapsulation of electrical/electronic components and substrates.

- Very low mixed viscosity to enhance the potting/encapsulation of intricate parts
- Long pot life and low exotherm for mass casting of parts up to 5” thick
- Very low Tg (-100°C) for excellent low temperature cycling and performance
- Excellent substrate adhesion when used in conjunction with G.E. SS 4155 primer or DC 1200 primer
- Available in dual cartridge kits for convenient dispensing to circuit board

HANDLING INFORMATION

Mix ratio, parts by weight:	100 (2716-A) 5.0 (2716-B)
Mix ratio, parts by volume:	100 (2716-A) 10.0 (2716-B)
Work life 100 gram mass @25°C, hours	>2

Handling notes

- Silicone resins and primers are moisture sensitive, therefore, blanket containers of any unused portions with argon or dry nitrogen prior to resealing.
- Check for filler settlement in Part A with clean, dry, metal spatula. If necessary, remix slowly by hand until uniform.

COMPATIBILITY:

Certain materials, chemicals, curing agents and plasticizers can inhibit the cure of silicone encapsulants and adhesives. Most notable of these include:

- Organotin and other organometallic compounds
- Silicone rubber containing organotin catalyst
- Sulfur, polysulfides, polysulfones or other sulfur-containing materials
- Amines, urethanes or amine-containing materials
- Unsaturated hydrocarbon plasticizers
- Some solder flux residues
- Latex rubber gloves

Mixing

Weigh 100 parts of **DIS-A-PASTE 2716-A** into a clean, dry, glass, metal, or plastic container and then add 5.0 parts of **DIS-A-PASTE 2716-B**. Machine mix on slow speed or hand stir with glass or metal stirrer until complete and thorough blending is achieved. Care should be taken to avoid any source of moisture contamination or air entrapment during mix. Notes: For best results and a void free encapsulation, vacuum mixture at less than 10 mm Hg for 5-10 minutes.

CURE SCHEDULE*

2 hours @ 125°C
or
4 hours @ 100°C

*These are conservative cure schedules and alternative cure schedules may be possible depending on application requirements.

TYPICAL PROPERTIES

(Values not to be used for specification purposes)

CHARACTERISTICS	**DIS-A-PASTE 2716-A/B**	**TEST METHOD**
Color	Off white	Visual
Specific gravity	2.1	ASTM D-1475
Viscosity @25°C, initial cps spindle # 7, spread 10rpm	16,000	ASTM D-1824
Flash point, °C	>150	ASTM D-92
Shelf Life @ 25°C in factory sealed containers, months	1	
Shelf life @ 5ºC or below in factory Sealed containers, months	6	

CURED PHYSICAL PROPERTIES	**DIS-A-PASTE 2716-A/B**	**TEST METHOD**
Hardness, shore A	60	ASTM D-2240
Tensile strength, @25°C, 0.062", thickness, psi	350	ASTM D-638
Elongation, %	100	ASTM D-638

Tear, strength, pli	30	ASTM D-638
Glass transition temp.,°C	-100	ASTM E-831-86
Thermal conductivity, @25°C W/M°K	0.75	COLORA

CURED ELECTRICAL PROPERTIES	**DIS-A-PASTE 2716-A/B**	**TEST METHOD**
Volume resistivity @25°C, ohm-cm	1.0 x 10^{15}	ASTM D-257
Dielectric strength, volts/mil @ 10KH_z, 0.125” thickness	>400	ASTM D-149
Dielectric constant @ $10\ \text{KH}_z$	5.1	ASTM D-150

SAFETY AND FIRST AID

DIS-A-PASTE 2716-A is a filled silicone resin blend that is safe to handle when used properly. It is judged to be low in toxicity and to be rated as a slight skin irritant. Avoid contact with skin and eyes and use in a well-ventilated area and avoid breathing vapors. In case of eye contact, flush with fresh clean water for at least 15 minutes; for skin contact, wash thoroughly with soap and water. If swallowed, drink at least one pint of water and call a physician. Refer to Material Safety Data Sheet for more details.

DIS-A-PASTE 2716-B is a silicone resin blend, which is safe to handle when used properly. Avoid skin and eye contact and use in a well-ventilated, hooded area. In case of eye contact, flush profusely with fresh clean water and contact a physician. For skin contact, wash thoroughly with soap and water. If inhaled, move subject to fresh air and provide water to drink. If swallowed, dilute with at least one pint of water and contact physician immediately. Refer to Material Safety Data Sheet for more details.

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