

## TC-1618 A/B

### ALUMINUM FILLED HI-TEMP EPOXY SURFACE COAT

TC-1618 A/B is an aluminum filled hi-temp epoxy surface coat that provides a tough 90 Shore D surface. This resin compound can be applied with a brush, to a thickness of  $\frac{1}{16}$ " on vertical surfaces or over sharp corners without sag or run-off. TC-1618 A/B features excellent heat resistance with ability to handle constant use at temperatures up to 300°F (149°C). This system does not contain "MDA" or "VCHD".

PHYSICAL PROPERTIES	TEST METHOD	TEST RESULTS
Hardness, Shore D	ASTM D2240	90 ± 2
Density (g/cc)	ASTM D792	1.7
Cubic Inches per Pound	N/A	16.6
Color/Appearance	Visual	Gray/Opaque
Tensile Strength (psi)	ASTM D638	7,200
Tensile Strength (psi)	ASTM D638	5.4 x 10 <sup>5</sup>
Flexural Strength (psi)	ASTM D790	14,100
Flexural Modulus (psi)	ASTM D790	7.4 x 10 <sup>5</sup>
Heat Deflection Temperature @ 264 psi	ASTM D648	245°F (118.3°C)
Compressive Strength (psi)	ASTM D695	28,000
Coefficient of Thermal Expansion (in/in °F)	ASTM D696	2.36 x 10 <sup>-5</sup>

HANDLING PROPERTIES	Part A	Part B
Mix Ratio (by weight)	100	10
Mix Ratio (by volume)	100	18
Specific Gravity	1.74	0.98
Color	Gray	Amber
Viscosity (cps) @ 77°F (25°C) Brookfield	155,000	150
Mixed Viscosity (cps) @ 77°F (25°C) Brookfield	54,000	
Work Time, 1 lb. mass @ 77°F (25°C)	45 minutes	
Gel Time	60 minutes	
Demold Time @ 77°F (25°C)	12 – 20 hours	

Properties above are typical and not for specifications

## **POST CURE:**

All physical properties are based upon post-curing this system. The following procedure provides the best results:

- 1) 150°F (66°C) for 1.5 to 2 Hours
- 2) 250°F (121°C) for 2 Hours
- 3) 300°F (149°C) for 2 Hours

Allow to cool in the oven. This procedure further stabilizes and eliminates possible thermal shocks for cavity tools that are temporarily clamped together for curing purposes. Rapid heat up and cooling can effectively be used after the initial post-cure process is completed.

## **STORAGE:**

Store at ambient temperatures, 65-80°F (18-27°C). Unopened containers will have a shelf life of 12 months from date of shipment when properly stored at recommended temperatures. Purge opened containers with dry nitrogen before re-sealing.

PACKAGING	Part A	Part B	Cubic Inches per Kit
Quart Kits	2 lbs.	3.2 oz.	36.5
Gallon Kits	10 lbs.	1 lb.	182.6
5-Gallon Kits	50 lbs.	5 lbs.	913

## **SAFETY PRECAUTIONS:**

Use in a well-ventilated area. Avoid contact with skin using protective gloves and protective clothing. Repeated or prolonged contact on the skin may cause an allergic reaction. Eye protection is extremely important. Always use approved safety glasses or goggles when handling this product.

## **IF CONTACT OCCURS:**

**Skin:** Immediately wash with soap and water. Remove contaminated clothing and launder before reuse. It is *not* recommended to remove resin from skin with solvents. Solvents only increase contact and dry skin. Seek qualified medical attention if allergic reactions occur.

**Eyes:** Immediately flush with water for at least 15 minutes. Call a physician

**Ingestion:** If swallowed, call a physician immediately. Remove stomach contents by gastric suction or induce vomiting only as directed by medical personnel. Never give anything by mouth to an unconscious person.

**Refer to the Material Safety Data Sheet before using this product.**



TC-1618 Part A SDS



TC-1618 Part B SDS