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Adhesives • Conductives • Encapsulants

## Technical Data Sheet

# 505-04

### One Component Epoxy

#### DESCRIPTION

505-04 is a one component epoxy adhesive and sealing compound. 505-04 is a high viscosity, rigid, fast curing epoxy adhesive, which yields a high heat and chemical resistant end product. It has excellent resistance to water, solvents, and other harsh chemicals. 505-04 can be used as a filter compound sealing media, as well as and adhesive for bonding ceramics and metals.

#### ADVANTAGES

- ☐ One-part Epoxy
  - ☐ Excellent adhesion to a wide variety of substrates
  - ☐ Excellent cure depth
  - ☐ High cohesive strength
- ☐ Tough
  - ☐ Automated dispense is easily accomplished.
  - ☐ Fast curing
  - ☐ Solvent free

#### Typical UNCURED PROPERTIES

Property	Test Method	Typical Value
Viscosity (Brookfield DBVI+ Spindle #7)	ASTM D 2393 1 rpm	224,000 cP
Viscosity (Brookfield DBVI+ Spindle #7)	ASTM D 2393 10 rpm	69,600 cP
Thixotropy		~3.2
Stroke Cure (160°C)		90 sec
Density	ASTM D 792	10.9 lb/gal
Specific Gravity	ASTM D 792	1.30
Hegman Grind		1.5 mils

#### TYPICAL CURED PROPERTIES

Property	Test Method	Typical Value
Tensile Strength (Al:Al)	ASTM D1002 (25°C)	3066 PSI
Hardness	Shore D – At 160°C	71D
Sag Resistance		.9293"
Glass Transition Temperature		126°C

#### Application INFORMATION

- The 505-04 is suitable for use in filter compound sealing media.
- 505-04 was specifically designed to bond filter end caps and filter side seams.
- Please contact a Cox Sales Company technical service professional for additional product recommendations.

#### CURE

Differential Scanning Calorimetry (DSC) equipment was used to estimate the cure time for

## SCHEDULE

99% conversion of the material.

	Cure Temperature	Cure Time (Minutes)
121°C	20	
160°C	3	
180°C	1	

**Clean Up** 505-04 can be easily cleaned with Acetone, Methyl Ethyl Ketone or PM Acetate. Other less stringent solvents and cleaners may be used but may not be as effective at cleaning.

### STORAGE AND

- **HANDLING** 505-04 has a maximum shelf life of six months if left in an unopened container and stored at or below 0°C.
- It is recommended that the product be stored at or below 0°C for a minimal increase in viscosity. Avoid high temperature exposure which will induce increase in viscosity.
- 505-04 will have a maximum shelf life of four months if stored at 25°C.
- The product must be conditioned back to ambient temperature (approximately 25°C) before use.
- **HEALTH AND SAFETY** 505-04 can cause severe eye irritation including stinging, redness and eye swelling.
- Avoid skin contact. 505-04 can cause mild skin irritations including redness or induce a rash. It should not aggravate any current skin conditions.
- If ingested, consult a physician immediately.
- Consult Cox Sales Company Product Material Safety Data Sheet for additional information on 505-04.

### APPLICATION

**ASSISTANCE** Cox Sales Company application specialists are available to assist you in production start-up with 505-04. For information, please call Cox Sales Company (540)345-2636

