A complete study of the raw material, physical properties, and processing of 734-161 has been conducted. All data for the years 1976 through 1979 was analyzed in an attempt to detect any significant trends that might explain differences in brake performance between 1976 and 1979 vintage materials.

1. Raw Materials

Resin and Associated Curing Agents

The solids content of the resin is somewhat lower today than in 1976. Typically the solids content in 1976 was "pushing" the upper specification limit of 86%. Resin delivered in late 1978 and early 1979 are typically 81 to 83 percent solids.

The cure time of late 1978/1979 resin is considerably less variable and somewhat longer than 1976 resin. Typically 1976 resin displayed a cure time of 67 to 73 seconds, while late 1978/1979 resin cured in 72 to 75 seconds. Spec. limits are +-4.

All other measurable properties of the resin and its' curing agents are comparable for the period of 1976 thru 1979 and within spec

In general, the data suggests a more uniform product today than in 1976, although some minor differences in cure time and solids content exist, with all still within specification

Organic Modifiers

The only detectable difference of the organic modifiers is a slightly courser CNSL particle. Focusing on the 40 mesh fraction, the 1976 material typically displayed 16 percent of weight retained, while 1978/1979 material is typically 20 weight percent. The spec limit for the 40 mesh fraction are.