UNION CARBIDE THE DISCOVERY COMPANY

PERFORMANCE DATA

Calidria ASBESTOS

PLAINTIFF'S EXHIBIT
KM-202

PERFORMANCE OF *CALIDRIA* R-G 144 AND COMPETITIVE THIXOTROPES

In Liquid Epoxy Resin Systems

F-42356

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UNION CARBIDE CORPORATION • CHEMICALS AND PLASTICS • 270 PARK AVENUE, N.Y.,N.Y. 10017

PERFORMANCE OF *CALIDRIA* R-G 144 AND COMPETITIVE THIXOTROPES

in Liquid Epoxy Resin Systems

CALIDRIA R-G 144 Asbestos is a highly purified fiber product that is an effective, low-cost thickening agent and thixotrope for epoxy resin systems. Produced by UNION CARBIDE's proprietary process, an unusually high fiber content is obtained, that is both grit-free and non-abrasive.

Comparative evaluations have shown that up to 50 per cent less CALIDRIA R-G 144 Asbestos is required than other commonly used thickeners, to provide equivalent viscosity and thixotropic properties, in liquid epoxy resin systems. Because CALIDRIA Asbestos is much lower in price, its cost-performance is outstanding.

Figures 1 and 2 compare the relative differences in viscosity and thixotropy of BAKELITE Epoxy Resin ERL-2774 solutions containing equivalent concentrations of CALIDRIA R-G 144 Asbestos, micro-crystalline silicate, and pyrogenic silica.

The superiority of CALIDRIA R-G 144 is again indicated, as shown in Figures 1 and 2, in that its use does not require amine-type additives usually recommended with the use of pyrogenic silicas.

Figures 3 and 4 show the superior performance of CALIDRIA R-G 144 Asbestos in BAKELITE Resin Hardener ZZL-0814, in comparison with equivalent mixtures of micro-crystalline silicate and pyrogenic silica.

RESIN AND AMINE HARDENER EVALUATION

In preparing test samples used in determining data for the following graphs, the thixotropes were added to the liquid resin or hardener at 25°C. and dispersed in a "Cowles" Dissolver at 2400 rpm. for 5 minutes.

VISCOSITY MEASUREMENTS

Viscosities of the prepared test samples were measured on a Brookfield Model RVF Viscometer at 2 and 20 rpm.

IMPORTANT: This information is not to be taken as a warranty or representation for which we assume legal responsibility nor as permission or recommendation to practice any patented invention without a license. It is offered solely for your consideration, investigation, and verification.

PERFORMANCE OF *CALIDRIA* R-G 144 AND COMPETITIVE THIXOTROPES

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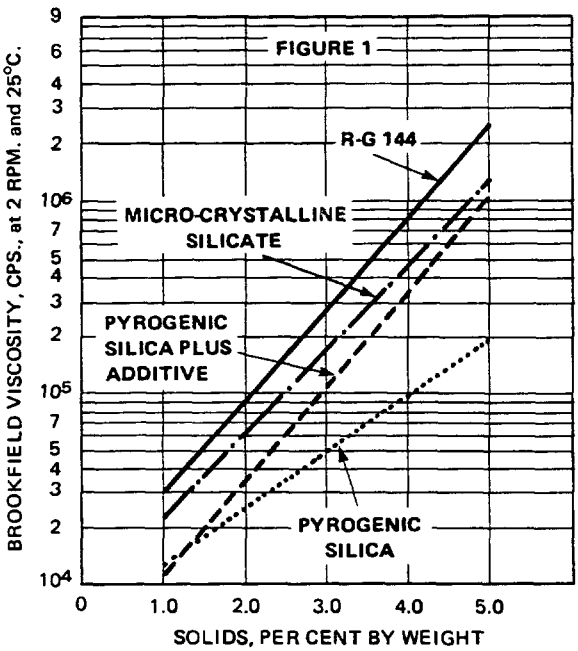
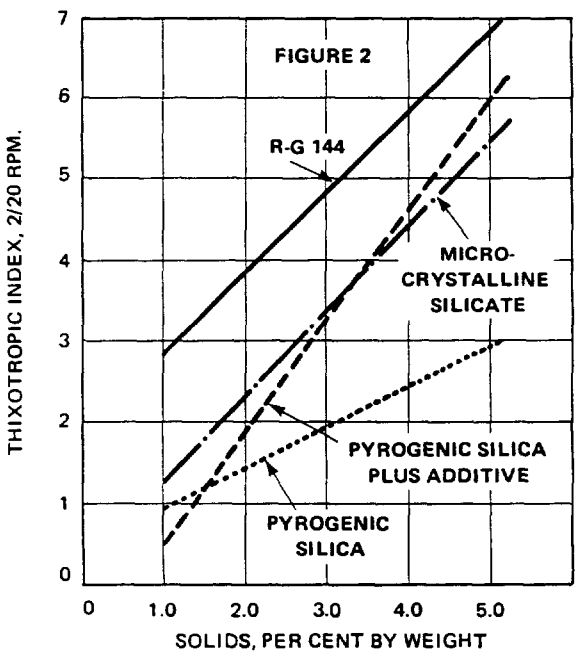
FIGURES 1 AND 2

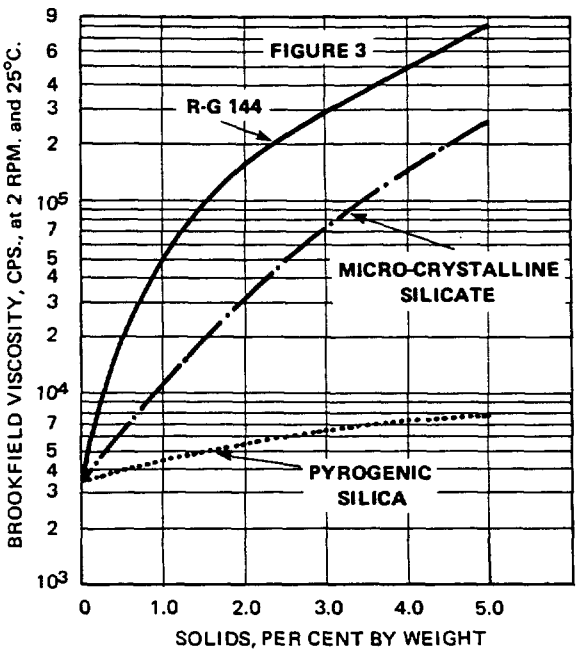
COMPARISON OF VISCOSITY AND THIXOTROPY OF BAKELITE® EPOXY RESIN ERL-2774 SOLUTIONS CONTAINING EQUIVALENT CONCENTRATIONS OF *CALIDRIA* R-G 144 ASBESTOS, MICRO-CRYSTALLINE SILICATE, AND PYROGENIC SILICA

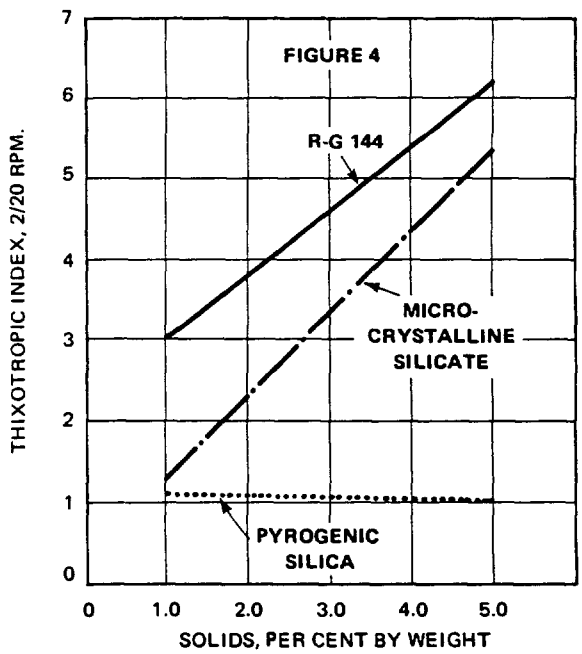




FIGURES 3 AND 4

PERFORMANCE OF *CALIDRIA* R-G 144 ASBESTOS IN BAKELITE® RESIN HARDENER ZZL-0814 COMPARED WITH EQUIVALENT MIXTURES OF MICRO-CRYSTALLINE SILICATE AND PYROGENIC SILICA





For complete information on properties, applications and prices, or technical assistance in utilizing

Calidria ASBESTOS

contact the nearest UNION CARBIDE Sales Office or CALIDRIA Asbestos Representative:

270 Park Avenue • New York, N. Y. 10017
P. O. Box K • King City, Ca. 93930

Sales Offices

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