



ZEEMAIL



Zeeospheres® Ceramics, LLC

129 Valentine Drive, Lockport, Louisiana 70374

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Abrasiveness of Zeeospheres®

Because of their extreme hardness, we are often asked whether ZEEOSPHERES® will cause abnormal wear to mixing, spraying, or molding equipment.

We have always thought that, because of their smooth surface and spherical shape, ZEEOSPHERES® should roll through equipment like miniature ball bearings – causing less abrasive wear than that which would be associated with other hard extenders. Feedback from customers using ZEEOSPHERES® has tended to confirm this theory.

Recently, ZEEOSPHERES® conducted a joint field test with Graco to measure the amount of spray tip orifice wear caused by white, high solids industrial coatings formulated with and without mineral extenders.* The tests clearly showed the following:

- The coating containing ZEEOSPHERES® caused no more spray tip orifice wear than a similar coating containing TiO₂ and no mineral filler.

- A Similar coating containing a common silica extender caused almost three times as much orifice wear as the Control or the ZEEOSPHERES® containing system.

- The ZEEOSPHERES® caused no observable damage to the high-pressure pump mechanism.

We are satisfied that this work confirms the low abrasive characteristics of ZEEOSPHERES® in a liquid system vs. other hard mineral extenders. We hope that this information will prove useful in addressing questions on this subject from your customers.

**The tests were a joint effort between ZEEOSPHERES® CERAMICS LLC. And Graco, Inc., Minneapolis, MN, the largest U.S. manufacturer of airless spray equipment. The test was supervised by Mr. Bob Davis, Graco District Manager. Measurements were made by Mr. Tom Becker, Graco Corporate Quality Laboratory Technician.*

Similar high solids alkyd paints were prepared with constant PVC of 49.94 and a solids weight percentage of 65.4 to 69.4. Each was sprayed through a Graco "President" airless spray unit (30:1) operating two spray guns at an average of 1800 psi, re-circulating five gallons of paint. Tip openings were carefully measured before and after each spray test, and tip wear evaluated. New tips with tungsten carbide inserts were used for each test.

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