



# Active Oxygen Dry Detergent Additive

The Active Oxygen in your laundry soap that improves its cleaning power is manufactured in a few places around the world. The product is shipped to detergent makers where it is combined with their dry detergents to add that extra cleaning power.

The product is essentially soda ash mixed with hydrogen peroxide. This combination is then dried. The resulting tiny white globs contain active oxygen as a result of the chemical combinations and are indistinguishable from dry laundry soap.

It is important that the moisture in the product be measured correctly and frequently to control end product quality and insure the process runs smoothly and efficiently. Previously samples were brought to the lab once an hour where a number of tests were run for a variety of parameters. Results took anywhere from 30 minutes to an hour to complete and required a significant amount of lab staff time to perform. Test results were unreliable and trending was used to get a “feel” where the process was. The result was a slow response and a low level of control over the delicate process.

An LT Isochem was put in the lab and ran along side their primary test methods. The analyzer is a reflectance configuration using a simple sample cup

that is easily fit onto the analyzer. The repeatability and stability of the results immediately impressed the users. **Tests are now run in seconds** delivering results for multiple properties with a single measurement. No sample preparation is required eliminating the need for carefully weighing out samples, using other expensive chemicals, and the multiple stages of complicated lab methods.



The LT Isochem is used for product from all stages of production from the very first combination of ingredients to final product quality of each lot being shipped to the customer.

The project is being forwarded to the stage of On-line testing that will give instant up to date values of the process parameters. In this configuration the Isochem analyzer will utilize fiber optic cable that allow for one analyzer to reach test points all over their production facility. Operators will have access to the information at the point of manufacturing without ever taking a sample to the lab.

As a result, the cost savings will be significant and immediate. They will be the result of a drastic reduction in laboratory testing, reduced process problems due to undesirable product effecting line operation, and lowering reaction, blending, and drying times to their optimum.