



May 11, 2009

To Whom it may Concern:

*OPW Fueling Containment Systems markets the most advanced flexible piping in the fueling industry. Since its entry into the underground piping market over a decade ago, OPW has used KYNAR (Polyvinylidene Fluoride-PVDF) as the inner barrier layer in its UL971 certified pipe. While certification with other liner materials is possible, we feel that KYNAR's 50 year track record of superior resistance to all known fuels and additives provides our customers with unmatched performance and peace of mind. KYNAR's density and extreme chemical resistance make it the ideal material for fuel transfer piping applications.*

*Testing agencies develop minimum standards and are sometimes behind the curve when fuels and additives evolve into the marketplace. For this reason, OPW-FCS routinely commissions performance tests above and beyond what is required by the current testing standard employed by testing agencies. OPW-FCS, not content to wait for the next evolution of testing standards, has commissioned rigorous tests in these real life fuels to assure our customers of our pipes stellar performance with these new fuels. The results of these supplemental tests verify what we already know... that that our pipe exhibits outstanding performance in the actual fuels it sees in the real world. The following data illustrates our pipes extreme resistance to Bio-diesel.*

*The following charts are based on a KYNAR immersion test in various blends of Bio-diesel. This test verified that the bio-diesel and bio-diesel blends do not have any effect on the properties of our pipe liner. This test was conducted by our PVDF material supplier.*

*The bottom line: OPW-FCS is committed to producing the world's best underground fuel pipe. Our FlexWorks pipe is fully tested with, compatible with, and its performance warranted for use with Bio-diesel and Bio-diesel blends. All pipes produced from 1997 to current under the OPW name have used Kynar as the barrier layer and fall into this category.*

*If there are any questions, please contact me directly.*

Thanks

A handwritten signature in black ink, appearing to read "K. Webster". The signature is fluid and cursive.

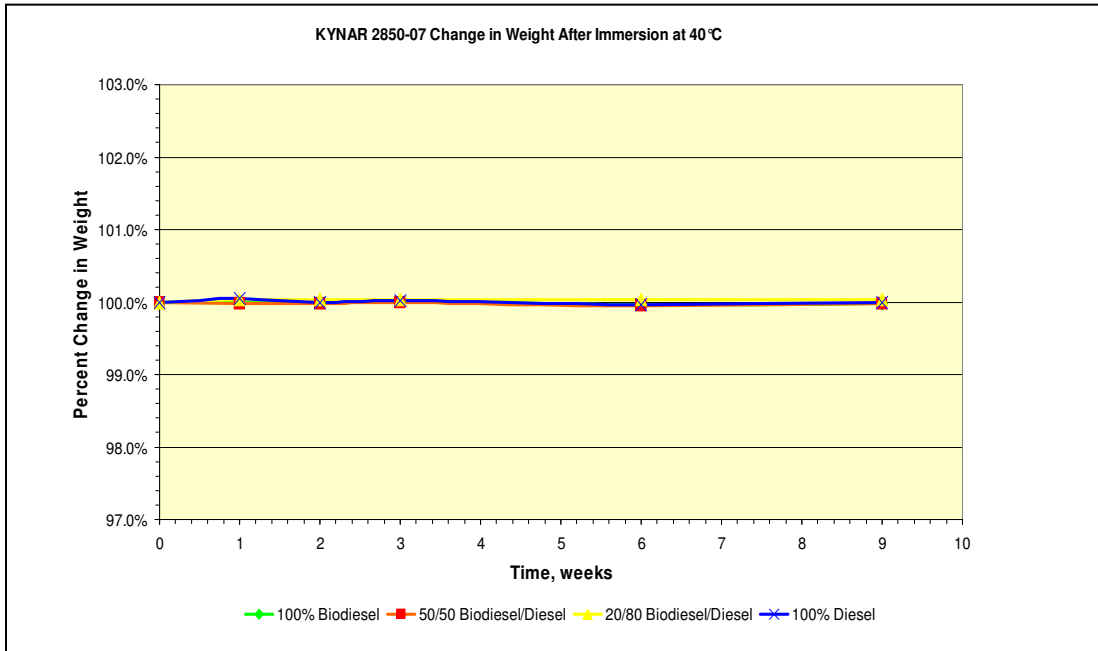
Kevin Webster  
Director of Engineering  
OPW-FCS

## **Kynar® PVDF: Resistance to Bio-Fuels**

- ❖ KYNAR PVDF Full Immersion Tests in Various Bio-Diesel Blends
- ❖ Tests Performed by ARKEMA

### **Conclusion: Bio-Diesel has no discernable effect on the properties of KYNAR PVDF**

- ❖ **Results: No weight gain in Biodiesel**



- ❖ **Results: No dimension changes in Biodiesel**

