



Inter Office

Director
Commercial Truck Quality
Commercial Truck Vehicle Center

September 14, 1995

To: Whom it may concern
Subject: Advertising Claims for Fuel Additive Duralt

This is to confirm that I wrote and signed the attached memo, "Advertising Claims for Fuel Additive Duralt," to Mr. R. G. Girolami, on July 19, 1989. At that time, I was an Engine Design Manager and part of my responsibilities were to review test results and sign-off on advertising claims for my particular products. Mr. Girolami, as a Manager in Ford SVO, was considering a proposal to after-market Duralt, and asked me to document the claims that I believed were substantiated by data.

Mr. Mark Nelson of PMC, had been meeting with me and others at Ford for a few years at this time, providing suggestions to their research plans and reviewing test results. I personally reviewed the data they provided and concluded that the claims in my letter, referenced above, were substantiated.

I would be pleased to discuss this further with you or a representative of your company, or visit with you when you're in the area.

Very truly yours,

Director, Commercial Truck Quality

Attachments (2 pages)

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POWERTRAIN ENGINEERING
July 19, 1989

To: Mr. R. J. Girolami

JUL 25 1989

cc: Mr. M. L. Nelson (PMC)

Subject: Advertising Claims for Fuel Additive Duralt®

I have reviewed test results for the fuel additive, Duralt®, beginning in 1983. Over the last six years, the PMC people have periodically shared new test results with myself and others in Ford, both through meetings and direct mail. At the same time, they have followed suggestions for further testing they could conduct which might further validate the positive results they were experiencing with the use of their product.

Their tests include both substantial fleet experience as well as statistically valid, controlled experiments conducted by credible, independent testing organizations (including Ricardo, ECS, SWRI, and NIPER Labs). A summary of their data was published by the SAE this year (SAE Technical Paper #890214, "A Broad-Spectrum, Non-Metallic Additive for Gasoline and Diesel Fuels: Performance in Gasoline Engines").

In summary, I conclude that there is sufficient data to support the following advertising claims for the use of Duralt® as a fuel additive in the amounts prescribed by the manufacturer.

In gasoline engines it:

1. Reduces hydrocarbon exhaust emissions about 10% in nearly new engines, and by an average of 60% in inspection-type tests in vehicles that have accumulated at least 20,000 miles.
2. Reduces the octane requirement increase (ORI) by about 70% (up to 6 octane numbers in U.S. cars) at the recommended treatment level.
3. Increases the road octane number by about 0.5.
4. Reduces fuel consumption by about 1-1/2% in newly-tuned automobiles to about 8% in less well-tuned autos.
5. Reduces combustion chamber deposits.
6. Allows conversions of engines from leaded to unleaded gasoline without loss in performance.
7. Reduces exhaust valve recession in engines prone to the problem.

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In diesel engines it:

8. Reduces particulates in an IDI engine by about 40% at the recommended treatment level.
9. Reduces maximum-load smoke in a 2-stroke engine by 25 to 60%.
10. Reduces hydrocarbon emissions in the IDI and 2-stroke DI engines by 13 to 43%.
11. Reduces carbon monoxide emission in the IDI and 2-stroke DI engines by 6 to 22%.
12. Increases cetane an average of 2-1/2 numbers.
13. Reduces diesel fuel consumption about 2 to 4%, and sometimes as much as 15%.
14. Reduces injection coking.
15. Reduces engine noise.
16. Improves fuel stability in storage.



A. L. Smith, Manager
Tempo/Topaz/ST44/CDW27 PT Dev. Dept.

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