

201-14132

December 16, 2002

By Mail

Christine Todd Whitman, Administrator
US EPA
PO Box 1473
Merrifield, VA 22116

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Attn: Chemical Right-to-Know Program – Test Plan Submission from HERTG
Registration Number

Dear Administrator Whitman:

The American Chemistry Council Petroleum Additives Panel (Panel) Health, Environmental, and Regulatory Task Group (HERTG) submits for review and public comment its test plan report, as well as related robust summaries, for the "*Arylpolyolefins*" under the Environmental Protection Agency's High Production Volume (HPV) Chemical Challenge Program. The HERTG understands that there will be a 120-day review period for the test plan report and that all comments generated by or provided to EPA will be forwarded to the HERTG for consideration.

Arylpolyolefins have a wide range of uses, but they are often employed as non-isolated intermediates for conversion to alkaryl sulfonates. Other uses of arylpolyolefins include use as base fluids in engine oils, transmission fluids, gear oils, hydraulic fluids and other lubricant fluid applications that require fluidity at low temperatures. Based upon the data reviewed in the attached report, the HERTG concludes that the physicochemical and toxicological properties of the proposed arylpolyolefins group are similar and follow a regular pattern as a result of structural similarity. The two chemicals in the arylpolyolefins group are as follows:

- Benzene, C₁₄-C₂₄-branched and linear alkyl derivatives (CAS # 115733-08-9) referred to in this report as the "C₁₄-C₂₄ alkaryl derivative."
- Benzene, polypropene derivatives (CAS # 68081-77-6) referred to in this report as the "polypropene derivative."

Below, the test plan for the arylpolyolefins is briefly summarized.

- Water solubility – Solubility data will be developed for the C₁₄-C₂₄ alkaryl derivative (CAS # 115733-08-9) and will be used to characterize the water solubility of the other category

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member. The C₁₄-C₂₄ alkaryl derivative (CAS # 115733-08-9) is the lower molecular weight category member and likely to have the highest water solubility.

- Biodegradation - Biodegradation data will be developed for the C₁₄-C₂₄ alkaryl derivative (CAS # 115733-08-9) and will be used to characterize the biodegradability of the other category member. The C₁₄-C₂₄ alkaryl derivative (CAS # 115733-08-9) is the lower molecular weight, more water-soluble category member and has the potential to exhibit the greatest extent of biodegradability.
- Aquatic Toxicity – Acute toxicity testing with a freshwater fish, invertebrate and alga will be conducted on the C₁₄-C₂₄ alkaryl derivative (CAS # 115733-08-9) and will be used to characterize the aquatic toxicity of the other category member.
- Mutagenicity – An *in vitro* chromosomal aberration study will be conducted on the C₁₄-C₂₄ alkaryl derivative (CAS # 115733-08-9) and the results will be bridged to the other category member.
- Systemic toxicity – An oral repeated-dose toxicity study will be conducted on the C₁₄-C₂₄ alkaryl derivative (CAS # 115733-08-9) and the results will be bridged to the other category member.
- Reproductive/developmental toxicity – A reproductive/developmental toxicity study will be conducted on the C₁₄-C₂₄ alkaryl derivative (CAS # 115733-08-9) and the results will be bridged to the other category member.

As this test plan was developed, careful consideration was given to the number of animals that would be required for tests included in the proposed plan and conditions to which the animals might be exposed. In consideration of the concerns of some non-governmental organizations about animal welfare, the use of animals in this proposed test plan has been minimized.

Thank you in advance for your attention to this matter. If you have any questions regarding the test plan report or the robust summaries, or HERTG's activities associated with the Challenge Program, please contact Sarah McLallen at 703-741-5607 (telephone), 703-741-6091 (telefax) or Sarah_McLallen@americanchemistry.com (e-mail).

Sincerely yours,

Courtney M. Price
Vice President, CHEMSTAR

cc: HERTG members