

October 8, 2001

By Mail

Christine Todd Whitman, Administrator
US EPA
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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 “*alkaryl sulfonate*” category of chemicals 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.

The alkaryl sulfonates in this category, which are used as petroleum lubricant additives, are characterized by having structural similarities and limited reactivity, low biological activity, and very low water solubility. Based upon the data reviewed in the attached report, the HERTG concludes that the physicochemical and toxicological properties of the proposed alkaryl sulfonate category members are similar and follow a regular pattern as a result of structural similarity. Thus, HERTG believes these twelve chemicals meet the EPA definition of a chemical category and will test them in accordance with the test plan summarized in the attached report. The twelve chemicals in the alkaryl sulfonate category are as follows:

- sulfonic acids, petroleum, calcium salts - (CAS # 61789-86-4, referred to in this report as petroleum derived calcium salt)
- sulfonic acids, petroleum, barium salts - (CAS # 61790-48-5, referred to in this report as petroleum derived barium salt)
- sulfonic acids, petroleum, sodium salts - (CAS # 68608-26-4, referred to in this report as petroleum derived sodium salt)
- sulfonic acids, petroleum, calcium salts, overbased - (CAS # 68783-96-0, referred to in this report as petroleum derived calcium salt, overbased)
- benzenesulfonic acid, mono-C16-C24 alkyl derivatives, calcium salts- (CAS # 70024-69-0, referred to in this report as C16-C24 alkaryl calcium salt derivative)
- benzenesulfonic acid, mono-C15-C30 branched alkyl and di-C11-C13 branched and linear alkyl derivatives, calcium salts, overbased - (CAS # 71486-79-8, referred to in this report as mixed mono-C15-C30 and di-C11-C13 alkaryl calcium salt, overbased derivative)
- benzenesulfonic acid, mono-C15-C30 branched alkyl and di-C11-C13 branched and linear alkyl derivatives - (CAS # 71549-79-6, referred to in this report as mixed mono-C15-C30 and di-C11-C13 alkaryl derivative)

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- benzenesulfonic acid, mono and dialkyl derivatives, magnesium salts - (CAS # 71786-47-5, referred to in this report as alkaryl magnesium salt derivative)
- benzenesulfonic acid, C15-C30 alkyl derivatives, sodium salts - (CAS # 78330-12-8, referred to in this report as C15-C30 alkaryl sodium salt derivative)
- benzenesulfonic acid, C14-C24 branched and linear alkyl derivatives, calcium salts - (CAS # 115733-09-0, referred to in this report as C14-C24 alkaryl calcium salt derivative)
- benzenesulfonic acid, C14-C24 branched and linear alkyl derivatives, calcium salts, overbased - (CAS # 115733-10-3, referred to in this report as C14-C24 alkaryl calcium salt, overbased derivative)
- benzenesulfonic acid, C14-C24 branched and linear alkyl derivatives - (CAS # 115829-36-2, referred to in this report as C14-C24 alkaryl derivative)

Briefly, the test plan for the HERTG alkaryl sulfonate category includes the following tests and computer modeling:

- Water solubility – Petroleum derived sodium salt (CAS #68608-26-4), C15-C30 alkaryl sodium salt (CAS #78330-12-8), and C14-C24 alkaryl calcium salt derivative (CAS # 115733-09-0) will be tested.
- Biodegradability – C15-C30 alkaryl sodium salt (CAS # 78330-12-8) will be tested.
- Photodegradation (atmospheric oxidation) modeling – Data will be developed using the AOP model in EPIWIN.
- Fugacity modeling – Environmental partitioning data will be calculated using a Mackay Level I equilibrium partitioning model.
- Acute fish toxicity - Limit tests will be conducted on petroleum derived barium salt (CAS # 61790-48-5), petroleum derived sodium salt (CAS # 68608-26-4), petroleum derived calcium salt, overbased (CAS # 68783-96-0), and C14-C24 alkaryl calcium salt derivative (CAS # 115733-09-0).
- Acute invertebrate toxicity - Limit tests will be conducted on petroleum derived sodium salt (CAS # 68608-26-4) and petroleum derived calcium salt, overbased (CAS # 68783-96-0).
- Alga toxicity - Limit tests will be conducted on petroleum derived sodium salt (CAS # 68608-26-4) and petroleum derived calcium salt, overbased (CAS # 68783-96-0).
- Repeated-dose toxicity - C14-C24 alkaryl calcium salt derivative (CAS # 115733-09-0) will be tested in a 28-day dose-range finding study for the reproductive/developmental toxicity study.
- Reproductive/developmental toxicity - C14-C24 alkaryl calcium salt derivative (CAS # 115733-09-0) will be tested in a one-generation study.

As HERTG developed this test plan, HERTG considered carefully and tried to limit how many animals might be required for tests included in the proposed plan and conditions to which the animals might be exposed. As noted above, a minimal amount of animal testing is proposed and, for those tests, HERTG believes the currently available scientific evidence suggests no significant toxicity will be demonstrated. As a result, HERTG believes that the concerns of some non-governmental organizations about animal welfare have been fully considered and that use of animals in this proposed test plan has been minimized.

Included in this package is a computer diskette that contains electronic copies of the HERTG's test plan report and accompanying robust summaries.

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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 me at 703-741-5607 (telephone), 703-741-6091 (telefax) or Sarah_loftus@americanchemistry.com (e-mail).

Sincerely,

Sarah C. Loftus
HERTG Technical Contact, US HPV Challenge

cc: HERTG members