

August 30, 2019

Submitted via [www.regulations.gov](http://www.regulations.gov)

***Re: Draft Toxic Substances Control Act (TSCA) Risk Evaluations and TSCA Science Advisory Committee on Chemicals (SACC) Meetings; 1-Bromopropane; Docket ID: EPA-HQ-OPPT-2019-0235.***

### **Introduction**

Albemarle Corporation is a global manufacturer of specialty chemicals, among whose product line includes 1-bromopropane as an important part of our portfolio. As a manufacturer and in conjunction with leading experts and key users of our products, Albemarle Corporation has developed considerable expertise with respect to 1-bromopropane.

Albemarle Corporation is pleased to provide comments on the U.S. Environmental Protection Agency's (EPA or Agency) draft risk evaluation for 1-bromopropane (1-BP) in advance of and for consideration by the Toxic Substances Control Act (TSCA) Science Advisory Committee on Chemicals (SACC) peer review panel meeting to be held September 10-12, 2019.

Please consider the following discussion points and related enclosures as comments to be entered into the record regarding the recent US EPA draft risk assessment of 1-bromopropane, specific to questions highlighted in the Draft Peer Review Charge Questions of the EPA/OPPT Work Plan Risk Assessment for 1-Bromopropane.

1. Recently, Dr. Bruce Ames wrote a brief article to which will be published in an upcoming special edition of Toxicology and Research Application. The article describes the general problem of the high false positive rates inherent in the current protocols for testing the carcinogenicity of chemicals in rats and mice in chronic bioassays.
  - a. Enclosure 1 – Dr. Bruce Ames' article (File: Dr.BruceAmesPreface.pdf).
2. Albemarle has collaborated with outside experts in human pulmonary pathology to evaluate the applicability of lung tumors in mice toward predicting the potential pulmonary tumorigenicity in humans. In our opinion, expressed in a recently published peer-reviewed manuscript, mouse lung tumors represent a level of sensitivity to chemical carcinogenesis that is much higher than would be expected in humans based upon an extensive literature.
  - a. Enclosure 2 – Summary of the issue (File: CommentEPADraftRiskAssessment.pdf)
  - b. Enclosure 3 – Corresponding peer-reviewed manuscript (File: MouseLungTumorPaper.pdf)
  - c. Enclosure 4 – Corresponding supplemental materials (File: MouseLungTumorPaperSupplementalMaterials.pdf)

3. Albemarle would also like to comment on an additional issue of importance, i.e. the potential role of ventilation and personal protective equipment. Albemarle conducted an occupational exposure study in an aerospace wiring assembly plant which employed two back to back vapor degreasers running 16 hours per day. In this high ventilation environment, exposure levels below the level of detection (< 0.2 ppm) were observed even for the machine operators. While the ventilation levels in this assembly facility were on the high end of the marketplace, these results demonstrate that ventilation in conjunction with the proper use of personal protective equipment can be used to significant effect in reducing exposure to 1-bromopropane or other chemicals.
  - a. Enclosure 5 – Internal Occupational Exposure Study (File: ALBInternalStudy1-BPEXposure 6-26-18.pdf)

Albemarle appreciates the opportunity to provide comments in advance of the SACC peer review process for the draft risk evaluation of 1-bromopropane and looks forward to continuing to work with the Agency as it moves forward with the risk evaluation process. If you have questions or if we can provide the SACC with further documentation for discussion, please contact me at bob.miller@albemarle.com or 980.299.5628.

Sincerely,  
ALBEMARLE CORPORATION



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