

8EHQ-1194-13255



CHEMICAL MANUFACTURERS ASSOCIATION

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Attention: TSCA 8(e) Coordinator  
Chemical Information Division  
Office of Toxic Substances  
U.S. Environmental Protection Agency  
401 M Street, S.W.  
Washington, D.C. 20460

**Contains No CBI**

RE: TSCA 8(e) Submittal: 1-Tetradecene (CAS Registry Number 1120361)

Dear Sir/Madam:

The Chemical Manufacturers Association (CMA) submits this notice in accordance with Section 8(e) of the Toxic Substance Control Act (TSCA). This notice is based on preliminary data from a combined Repeated Dose Toxicity Study/Reproduction/Developmental Toxicity Screening Test in Rats with 1-Tetradecene, CAS Registry Number 1120361. This information is not confidential.

This submission is made on behalf of the manufacturers that are parties to research being carried out at Springborn Laboratories, Inc., under the sponsorship of the CMA Alpha Olefins Panel. The three of five members of the Panel that are manufacturers of 1-tetradecene are: Albemarle Corporation, Shell Chemical Company and Chevron Chemical Company. The test material is a composite of products obtained from each of the three manufacturers.

1-Tetradecene was administered orally to rats at dosage levels of 100, 500, and 1000 mg/kg/day. F<sub>0</sub> males were treated for 28 days prior to mating and until euthanasia. F<sub>0</sub> females designated for neurotoxicity evaluations were treated for 28 days prior to the initiation of mating for the breeding females and until the day prior to euthanasia. The F<sub>0</sub> females assigned to a breeding phase were treated for 14 days prior to mating, and during mating, gestation, and lactation until euthanasia. Viability and development of the F<sub>1</sub> generation were evaluated.

Test article related microscopic changes were observed in the kidneys of male rats from the 100, 500, and 1000 mg/kg/day groups. The microscopic findings consisted of accumulations of inclusions in the epithelial cells of the proximal convoluted tubules of the kidneys. One control animal also had similar inclusions. Although specific assays for alpha 2μ-globulin have not been performed, this condition is consistent with alpha 2μ-globulin associated hydrocarbon nephropathy which is specific to young adult male rats. EPA has concluded that similar findings for other chemicals were not considered a potential risk to humans.

Minimal to mild liver changes were seen in all groups. A slight increase over control of multifocal hepatocellular vacuolation was

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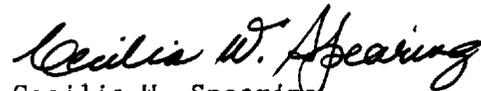
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observed in the 500 and 1000 mg/kg/day groups. We believe this to be an adaptive change and not an indication of toxicity.

Although we do not believe that these findings are indicative of serious or prolonged incapacitation, we are reporting them since no such findings have been reported for 1-tetradecene.

The final report will be sent to you when it is received. If you need additional information or have any questions, please do not hesitate to call me at (202) 887-1305.

Sincerely,



Cecilia W. Spearing  
Manager  
Alpha Olefins Panel/TRTG

cc: Alpha Olefins Panel  
Alpha Olefins Toxicology Research Task Group