



U.S. Department  
of Transportation  
**Research and  
Special Programs  
Administration**

400 Seventh St., S.W.  
Washington, D.C. 20590

JUL 23 2001

Reference No. 01-0046

Mr. David Mashinski  
HSE-Advisor  
Shell Chemicals  
P.O. Box 2463  
Houston, TX 77252-2463

Dear Mr. Mashinski:

This is in response to your inquiry concerning the proper shipping name for different commercial grades of xylene under the Hazardous Materials Regulations (49 CFR Parts 171-180).

You state that your company produces two commercial grades of xylene. The first grade is a xylene stream produced prior to the extraction of the ethylbenzene isomer. It contains all four isomers of ortho-, para-, meta- xylenes and ethylbenzene and more specifically is composed of 80-90% xylenes (mixed isomers) and 10-20% ethylbenzene. The second grade is the stream following extraction of the ethylbenzene. You asked whether the most appropriate proper shipping name for the first grade would be "Xylenes," UN1307 or "Flammable liquids, nos (Xylenes, Ethylbenzene)," UN1993.

It is our opinion that both descriptions are acceptable. Various reference sources, including the American Society for Testing and Materials' Standard D843-97, "Standard Specification for Nitration Grade Xylene," recognize that various technical and commercial grades of Xylenes may contain ethylbenzene.

I hope this satisfies your request.

Sincerely,

Hattie L. Mitchell, Chief  
Regulatory Review and Reinvention  
Office of Hazardous Materials Standards



01-0046

172.101



Edmonson  
§172.101  
Proper Shipping  
Name  
01-0046  
J

February 7, 2001

Office of Hazardous Materials Standards – DHM-1  
U.S. Department Of Transportation  
400 7<sup>th</sup> Street, S.W.  
Washington, D.C. 20590-0001

Dear Mr. Billings,

Shell Chemical Company seeks clarification in determining the most appropriate proper shipping name (PSN) for Xylene. Shell Chemical's Xylene contains 80-90% Xylene (mixed isomers) and 10-20% Ethylbenzene.

A question continues to arise regarding as to when a material should be considered "technically pure" for purpose of assignment of the PSN.

Shell's Xylene is "technically pure". The material is produced as intended for commercial use without the addition of other ingredients; said another way, as the material comes off the production units it is in conformance with commercially viable specifications.

In the case of xylenes, there are two commercially viable forms (prior to the intentional extraction of the isomers) of "Mixed xylenes" one is applied to the xylene stream which is produced prior to the extraction of the ethylbenzene isomer. This stream contains all 4 isomers (ortho-, para-, meta- xylenes and ethylbenzene). The second is the stream following the extraction of ethylbenzene which contains only ortho-, meta, and para-xylenes. It is our opinion PSN "Xylenes" applies to both.

We have noticed our competitors in the industry are using both Xylene as a PSN and others using Flammable Liquids, NOS, (Xylene, Ethylbenzene).

We would appreciate your opinion and clarification regarding the most appropriate proper shipping name for the Xylene as stated above.

Our thanks in advance for your prompt consideration of this request.

Sincerely,

David Mashinski  
HSE-Advisor