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Re: TSCA Section 8(e) Notification

Dear Sir or Madam:

ChemFirst Inc is submitting this notice on behalf of TriQuest L.P. in accordance with Section 8(e) of the Toxic Substances Control Act (TSCA) and EPA's Statement of Interpretation and Enforcement Policy, 43 Fed. Reg. 1110 (March 16, 1978).

The basis for this submission is unaudited results of a guinea pig maximization study. Specifically, 4-ethenylphenol (CAS no 2628-17-3), commonly called 4-hydroxystyrene, dissolved in diethylene glycol, is considered to be an extreme skin contact sensitizer in guinea pigs under the test conditions. All 20 of 20 test animals showed a positive response. A summary of the study results is attached.

Precautions in handling the test substance communicated to workers and customers via MSDS include the following:

**HANDLING:** Handle with extreme caution. Avoid breathing dust or vapors. Avoid skin exposure. Wear impervious gloves. Utilize protective equipment to minimize all exposure.

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98 FEB 2 AM 9:05

Please let me know if you need additional information.

Sincerely,

Ellen R. Stephens, Ph.D. DABT  
Manager, Toxicology  
601-938-2219

[ (7)

## SUMMARY

**UNAUDITED  
DRAFT**

The dermal sensitization potential of C-2037 was evaluated in Hartley-derived albino guinea pigs. Ten male and ten female guinea pigs received intradermal injections of 5% w/v C-2037 in propylene glycol along with injections of FCA and C-2037 in FCA. One week later, the test animals received a topical application of 100% C-2037. Challenge and rechallenge control animals received similar intradermal and topical treatments except propylene glycol was used in place of the test article. Following a two-week rest period, a challenge was performed whereby the nineteen test and ten previously untreated (naive) challenge control guinea pigs were topically treated with 25% w/v C-2037 in propylene glycol. Challenge responses in the test animals were compared with those of the challenge control animals. Following a one-week rest period, a rechallenge was performed whereby the nineteen test animals and ten previously untreated (naive) rechallenge control guinea pigs were topically treated with 1% and 5% w/v C-2037 in propylene glycol. Rechallenge responses in the test animals were compared with those of the rechallenge control animals.

C-2037: Following challenge with 25% w/v C-2037 in propylene glycol, dermal scores of 2 to 3 (most with blanching, edema and/or eschar) were noted in 19/19 test animals and dermal scores of 1 were noted in 4/10 challenge control animals at the 24 hour scoring interval. At the 48 hour scoring interval, dermal scores of 1 to 3 (most with blanching, edema and/or eschar) were noted in 19/19 test animals and dermal scores of 1 were noted in 1/10 challenge control animals. Dermal reactions in the remaining challenge control animals were limited to scores of 0 to  $\pm$ . Group mean dermal scores were noted to be higher in the test animals as compared with the challenge control animals.

Following rechallenge with 1% w/v C-2037 in propylene glycol, dermal scores of 1 to 2 (most with edema) were noted in 19/19 test animals and dermal scores of 1 were noted in 1/10 rechallenge control animals at the 24 hour scoring interval. At the 48 hour scoring interval, dermal scores of 1 to 2 (most with edema) were noted in 18/19 test animals and dermal scores of 1 were noted in 1/10 rechallenge control animals. Dermal reactions in the remaining test and rechallenge control animals were limited to scores of 0 to  $\pm$ . Group mean dermal scores were noted to be higher in the test animals as compared with the rechallenge control animals.

Following rechallenge with 5% w/v C-2037 in propylene glycol, dermal scores of 1 to 2 (most with edema) were noted in 18/19 test animals and dermal scores of 1 were noted in 1/10 rechallenge control animals at the 24 hour scoring interval. At the 48 hour scoring interval, dermal scores of 1 to 2 (most with edema) were noted in 18/19 test animals and dermal scores of 1 were noted in 1/10 rechallenge control animals. Dermal reactions in the remaining test and rechallenge control animals were limited to scores of 0 to  $\pm$ . Group mean dermal scores were noted to be higher in the test animals as compared with the rechallenge control animals.

[ ] (8)

$\alpha$ -Hexylcinnamaldehyde: Using  $\alpha$ -Hexylcinnamaldehyde as a positive control, [ ] has completed a study during the past six months which provided historical control data for contact sensitization to this agent utilizing the test system described herein (Modified Buehler Design). Following induction at 10% (Induction 1) and 5% (Inductions 2 and 3) w/v  $\alpha$ -Hexylcinnamaldehyde in ethanol and challenge at 2.5% and 5% w/v  $\alpha$ -Hexylcinnamaldehyde in acetone, a contact sensitization response was observed, thereby demonstrating the sensitivity of the test system for this sensitizing agent.

Based on the results of this study, C-2037 is considered to be a contact sensitizer in guinea pigs. The results of the  $\alpha$ -Hexylcinnamaldehyde positive control study demonstrated that a valid test was performed and indicated that the test design would detect potential contact sensitizers.

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TABLE 1  
 A DERMAL SENSITIZATION STUDY IN GUINEA PIGS  
 INDIVIDUAL CHALLENGE DATA  
 (C-2037)

CLIENT: HOECHST CORPORATION

PAGE 1

Group	Animal No./ Sex	Dermal Scores	
		24 Hr	48 Hr
		25%	
Test	1706/M	2 ED-1, SL-3, BLA-1	2 ED-2, SL-3, BLA-1
	1707/M	M-3 ED-2, SL-2, ES-1	M-3 ED-2, SL-2, ES-2, DES
	1708/M	2 ED-2	1 ED-1
	1709/M	2 ED-1, SL-1	1 ED-1, DES
	1710/M	2 ED-1, BLA-1, ES-1	M-3 ED-2, SL-2, ES-2
	1711/M	2 ED-2, SL-3	2 ED-1, SL-1
	1712/M	2 ED-2, SL-2, ES-1	2 ED-2, SL-2, ES-1, DES
	1714/M	2 ED-1	2 ED-1, DES
	1715/M	2 ED-1	2 ED-1, DES
	1768/F	2 ED-1	2 ED-1
	1769/F	3 ED-2, SL-2	2 ED-1, SL-2
	1770/F	2 ED-2, SL-2	2 ED-2, SL-2
	1771/F	2 ED-2, SL-3, BLA-1	2 ED-2, SL-3, BLA-1, ES-1
	1772/F	2 ED-2, SL-3, BLA-1	2 ED-2, SL-2, BLA-1, DES
	1773/F	2 ED-2, SL-2, BLA-1	2 ED-2, SL-2
	1774/F	3 ED-2, SL-3, BLA-1, ES-1	2 ED-2, SL-3, BLA-1, ES-1
	1775/F	2 ED-2, SL-3, BLA-1	2 ED-1, BLA-1, DES
	1776/F	2 ED-2, SL-3	2 ED-2, SL-3, DES
	1777/F	2 ED-2, SL-2	2 ED-2, SL-2
	Mean	2.2	2.0

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Note: For the purpose of calculation, ± = 0.5.

See Appendix B for definition of codes.

TABLE 1  
 A DERMAL SENSITIZATION STUDY IN GUINEA PIGS  
 INDIVIDUAL CHALLENGE DATA  
 (C-2037)

CLIENT: HOECHST CORPORATION

PAGE 2

Group	Animal No./ Sex	Dermal Scores		
		24 Hr	48 Hr	± DES
Challenge Control	1717/M	1		±
	1718/M	±		±
	1719/M	0		0
	1720/M	1		1
	1721/M	±		±
	1778/F	1		±
	1779/F	±		±
	1780/F	1		±
	1781/F	±		±
	1782/F	±		0
	Mean	0.7		0.5

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Note: For the purpose of calculation, ± = 0.5.

See Appendix B for definition of codes.

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TABLE 2  
 A DERMAL SENSITIZATION STUDY IN GUINEA PIGS  
 INDIVIDUAL RECHALLENGE DATA  
 (C-2037)

CLIENT: HOECHST CORPORATION

PAGE 1

Group	Animal No./ Sex	Dermal Scores			Dermal Scores		
		24 Hr	48 Hr	5%	24 Hr	48 Hr	5%
Test	1706/M	2ED-2	2ED-1	2ED-1	2ED-1	2ED-1	2ED-1
	1707/M	2ED-2, SL-1	2ED-1, SL-1, DES	2ED-1	2ED-1	2ED-1, DES	2ED-1, DES
	1708/M	1	±	±	±	0	0
	1709/M	2ED-1	2ED-1	2ED-1	2ED-1	1	1
	1710/M	2ED-2, SL-4	2ED-2, SL-3, ES-1, DES	2ED-2, SL-3	2ED-2, SL-3	1	1
	1711/M	2ED-1	2ED-1	2ED-1	2ED-1	2	2
	1712/M	2ED-2, SL-3	2ED-2, SL-3	2ED-2	2ED-2, SL-2	2ED-1	2ED-1
	1714/M	2ED-2	2ED-2	2ED-2	2ED-2, SL-2	2ED-1, SL-2, DES	2ED-1, SL-2, DES
	1715/M	1	1	1	1	2ED-1, SL-2, DES	2ED-1, SL-2, DES
	1768/F	2	2ED-1	2ED-1	2ED-1	2ED-1	2ED-1
	1769/F	2ED-2	2ED-1, DES	2ED-1, DES	2ED-1, DES	2ED-1, DES	2ED-1, DES
	1770/F	2ED-1	2ED-1	2ED-1	2ED-1	2ED-1	2ED-1
	1771/F	2ED-2, SL-2	2ED-2, SL-2, DES	2ED-2, SL-2	2ED-1	2ED-1, ES-1, DES	2ED-1, ES-1, DES
	1772/F	2	2ED-1	2ED-1	2	2ED-1	2ED-1
	1773/F	2ED-1	2ED-1	2ED-1	2ED-2	2ED-1, DES	2ED-1, DES
	1774/F	2ED-1	2ED-1, SL-2, DES	2ED-1, SL-2, DES	2	2ED-1, SL-2, DES	2ED-1, SL-2, DES
	1775/F	2	2ED-1	2ED-1	2ED-1	2ED-1	2ED-1
	1776/F	2ED-2	2ED-1	2ED-1	2ED-2	2ED-1	2ED-1
	1777/F	2ED-2	1	1	1	1	1
	Mean	1.9	1.8	1.6	1.7	1.7	1.7

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Note: For the purpose of calculation, ± = 0.5. See Appendix B for definition of codes.

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CLIENT: HOECHST CORPORATION  
 TABLE 2  
 A DERMAL SENSITIZATION STUDY IN GUINEA PIGS  
 INDIVIDUAL RECHALLENGE DATA  
 (C-2037)  
 PAGE 2

Group	Animal No./ Sex	Dermal Scores			Dermal Scores		
		1%			5%		
		24 Hr	48 Hr	5%	24 Hr	48 Hr	5%
Rechallenge	1722/M	0	0	±	0	0	
Control	1723/M	0	0	±	0	0	
	1724/M	0	0	±	0	0	
	1725/M	0	0	±	±	±	
	1726/M	0	0	0	0	0	
	1783/F	0	0	0	0	0	
	1784/F	1	1	1	1	1	
	1785/F	0	0	0	0	0	
	1786/F*	0	0	0	0	0	
	1787/F	0	0	0	0	0	
Mean		0.1	0.1	0.3	0.2	0.2	

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Note: For the purpose of calculation, ± = 0.5.

\*Animal found out of binding at the time of binding removal.

See Appendix B for definition of codes.