## Technical Information

## Stepan

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# MAMMALIAN TOXICOLOGY OF AMMONIUM ALKYL ETHER SULFATE

**Applicable to these current Stepan products:** 

ALPHA FOAMER® STEOL® CA-130		POLYSTEP® B-11 STEOL® CA-230-K		
STEOL® CA-330	STEOL® CA-460	STEPOSOL® CA-406H		
Applicable to these inactive Stepan products:				
PETROSTEP® ES-65A	POLYSTEP® B-22	STEPOSOL® CA-207		
STEPOSOL® CA-319				

### **Toxicological Information:**

Test/Conditions	Results/Classification	References			
Mammalian Toxicology:					
Acute Oral Toxicity (rat) (gavage) (14 day) n = 10	LD <sub>50</sub> > 5g/kg (practically non-toxic orally)	Stepan Study No. 82-003A, D, G, JACT*, 2(5), 1983			
Primary Skin Irritation (rabbit) (24 hr.) n=9	Mild to moderate skin irritation @ 15% active	JACT, 2(5), 1983			
Primary Eye Irritation (rabbit) (24 hr.) n=6	Moderate eye irritation @ 15% active	JACT, 2(5), 1983			
Subchronic Dermal Irritation (rabbit) (28 day) (first topical application on 299 mg/kg; subsequent topical applications 50 mg/kg)	Moderate to severe skin irritation	JACT, 2(5), 1983			
Vaginal Mucosa Irritation (dog) (3 weeks)	No irritation was observed @ 0.11% concentration	JACT, 2(5), 1983			

<u>Test/Conditions</u>	Results/Classification	References

Clinical Studies:	al Studies:		
Dermal Irritation/Sensitization (human) n=20	No indication of sensitization @ 0.11% active	JACT, 2(5), 1983	
Phototoxicity Study (human) n=25	Moderate skin irritation in 6 individuals. No indication of phototoxicity	JACT, 2(5), 1983	
Twenty-One Day Cumulative Sensitization Test (human) (@24 hr) n=12	Potential for mild cumlative irritation @ 0.11%	JACT, 2(5), 1983	

#### Conclusion:

The Cosmetic Ingredient Review (CIR) Expert Panel recognizes that sodium laureth sulfate may cause skin and eye irritation. However, based on the available information presented for review, the Panel has concluded that ammonium laureth sulfate is safe as presently used in cosmetic products.

#### **References:**

\*Journal of the American College of Toxicology (JACT) 2(5), 1983, pp. 23-31.

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