

Sodium Lauryl Sulfoacetate

Christina L. Burnett*, **Wilma F. Bergfeld****, **Donald V. Belsito****,
David E. Cohen**, **Curtis D. Klaassen****, **Daniel C. Liebler*****,
Allan E Rettie**, **David Ross****, **Thomas J. Slaga****, **Paul W. Snyder****,
Susan Tilton**, **Monice Fiume[†]**, and **Bart Heldreth[‡]**

International Journal of Toxicology
2023, Vol. 42(Supplement 3) 100S–101S
© The Author(s) 2023
Article reuse guidelines:
sagepub.com/journals-permissions
DOI: 10.1177/10915818231204274
journals.sagepub.com/home/ijt



Abstract

The Expert Panel for Cosmetic Ingredient Safety reviewed updated information that has become available since their original assessment from 1987, along with updated information regarding product types, and frequency and concentrations of use, and reaffirmed their original conclusion that Sodium Lauryl Sulfoacetate is safe as a cosmetic ingredient in the practices of use and concentration as described in this report.

Keywords

Sodium Lauryl Sulfoacetate, Cosmetics, Safety

The Expert Panel for Cosmetic Ingredient Safety first published the Final Report on the Safety Assessment of Sodium Lauryl Sulfoacetate in 1987.¹ The Expert Panel concluded that this ingredient is safe as a cosmetic ingredient in the present practices of use and concentration. Upon re-review, the Expert Panel reaffirmed the original conclusion, as published in 2006.²

Because it has been at least 15 years since the prior re-review was published, in accordance with Cosmetic Ingredient Review Procedures, the Expert Panel again determined whether the safety assessment should be reopened. At the September 2022 meeting, the Expert Panel considered updated 2022 information regarding product types and ingredient use frequencies as reported in the US Food and Drug Administration (FDA) Voluntary Cosmetic Registration Program (VCRP) database³ and maximum use concentrations provided by the Personal Care Products Council (Council).⁴ Since the initial re-review was considered, the frequency of use has increased slightly, from 68 to 97 uses.^{2,3} In 2004, the maximum concentration of use for this ingredient was reported to be 4% in leave-on products, 5% in rinse-off products, and 21% in products diluted for use.² Concentration of use provided by the Council in 2022 indicate that Sodium Lauryl Sulfoacetate is used at up to 2.5% in leave-on products (foot

powders), up to 10.2% in rinse-off products (pre-shave lotions), and up to 8.4% in products diluted for use (bubble baths).⁴ The cumulative frequency and concentration of use data are presented in Table 1.

An extensive search of the world's literature was performed for studies dated 2004 forward, and no new data were found. The Expert Panel reviewed 2022 frequency and concentration of use data, noted the lack of any new, available, relevant safety data, and once again reaffirmed the 1987 conclusion regarding the safety of Sodium Lauryl Sulfoacetate in cosmetics.

Author's Note

Unpublished sources cited in this report are available from the Director, Cosmetic Ingredient Review, 1620 L Street, NW, Suite 1200, Washington, DC 20036, USA.

Author Contributions

The articles in this supplement were sponsored by the Cosmetic Ingredient Review.

Declaration of Conflicting Interests

The articles in this supplement were sponsored by the Cosmetic Ingredient Review.

*Cosmetic Ingredient Review Senior Scientific Analyst/Writer

**Expert Panel for Cosmetic Ingredient Safety Member

***Expert Panel for Cosmetic Ingredient Safety Former Member

[†]Cosmetic Ingredient Review Senior Director

[‡]Cosmetic Ingredient Review Executive Director

Corresponding Author:

Bart Heldreth, Executive Director, Cosmetic Ingredient Review, 1620 L Street, NW, Suite 1200, Washington, DC 20036, USA.

Email: cirinfo@cir-safety.org

Table 1. Frequency (2022; 2002) and concentration (2022; 2004) of use according to duration and exposure.

	# of Uses		Max Conc of Use (%)	
	2022 ³	2002 ²	2022 ⁴	2004 ²
Totals*	87	68	0.00028-10.2	.6-21
Duration of use				
Leave-on	5	1	.8-2.5	4
Rinse-off	52	6	.00028-10.2	5
Diluted for (bath) use	30	61	3-8.4	21
Exposure type				
Eye area	NR	NR	NR	NR
Incidental ingestion	NR	1	.74	0.7
Incidental inhalation-spray	1 ^b	1	1.5	2; 2 ^b
Incidental inhalation-powder	1 ^b	NR	2.5	1 ^c ; 2 ^b
Dermal contact	53	64	.00028-10.2	.6-21
Deodorant (underarm)	NR	NR	NR	NR
Hair – non-coloring	33	1	.53-4.4	1-5
Hair-coloring	1	2	3	NR
Nail	NR	NR	NR	4
Mucous membrane	42	62	.00028-10	.6-21
Baby products	1	NR	.53	1

*Because each ingredient may be used in cosmetics with multiple exposure types, the sum of all exposure types may not equal the sum of total uses.

^aNot specified whether a spray or a powder, but it is possible the use can be as a spray or a powder; therefore, the information is captured in both categories.

^bIt is possible these products are powders, but it is not specified whether the reported uses are powders.

NR-no reported use.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: The articles in this supplement were sponsored by the Cosmetic Ingredient Review. The Cosmetic Ingredient Review is financially supported by the Personal Care Products Council.

References

1. Elder RL. Final report on the safety assessment of Sodium Lauryl Sulfoacetate. *J Am Coll Toxicol*. 1987;6(3):261-277.
2. Andersen FA. Annual review of cosmetic ingredient safety assessments - 2004/2005. *Int J Toxicol*. 2006;25(Suppl 2):65-69.
3. U.S. Food and Drug Administration Center for Food Safety & Applied Nutrition (CFSAN). Voluntary Cosmetic Registration Program - Frequency of Use of Cosmetic Ingredients. (*Obtained under the Freedom of Information Act from CFSAN; Requested as "Frequency of Use Data" January 4, 2022, received January 11, 2022*).
4. Personal Care Products Council. *Concentration of Use by FDA Product Category - Sodium Lauryl Sulfoacetate*, 2022. Unpublished data submitted by the Personal Care Products Council on July 7, 2022.