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Quaternium-26

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Abstract

The Expert Panel for Cosmetic Ingredient Safety reviewed newly available studies since their original assessment in year 2000, along with updated information regarding product types and concentrations of use, and confirmed that sodium Quaternium-26 is safe as a cosmetic ingredient in the practices of use and concentration as described in this report.

Keywords

Cosmetics, Safety, Quaternium-26

In the year 2000 safety assessment of Quaternium-26, the Expert Panel for Cosmetic Ingredient Safety stated that this ingredient is safe as used in cosmetic products, provided that it is not being used in products in which *N*-nitroso compounds may be formed.[1] New safety test data, since the final report was issued on Quaternium-26, were neither found in the published literature nor provided by the Personal Care Products Council (Council); however, the Expert Panel reviewed updated information regarding product types and ingredient use frequencies provided by the US Food and Drug Administration (FDA) and use concentrations provided by the Council.[2,3] The Expert Panel determined to not reopen this safety assessment and reaffirmed the original conclusion that Quaternium-26 is safe as used in cosmetic products as given in Table 1.

Unlike the current exclusive use of Quaternium-26 in non-coloring hair products (16 rinse-off and 10 leave-on reported uses), data in the final report that was published in 2000 indicated use in this product type as well as in cleansing skin care preparations and bath soaps and detergents. The difference in Quaternium-26 use frequency is not significant when data in the published final report are compared with current data (i.e., 25 uses and 26 uses, respectively).[3] According to the published final report from 2000, Quaternium-26 was being used at concentrations up to 5%. However, the results of a concentration of use survey that was conducted by the Council in 2015-2016 indicated that Quaternium-26 is being used at maximum concentrations up to 2% in rinse-off products (hair conditioners) and maximum concentrations up to .15% in leave-on products (tonics, dressings, and other hair grooming aids).[2]

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Unpublished sources cited in this report are available from the Director, Cosmetic Ingredient Review, 1620 L Street, NW, Suite 1200, Washington, DC 20036, USA.

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Table 1. Frequency and Concentration of Use of Quaternium-26 According to Duration and Exposure.[2,3]

	# of Uses		Max Conc of Use (%)	
	Quaternium-26			
	2017	1997	2016	1984
Totals[a]	26	25	.063-2	5
Duration of use				
Leave-on	10	9	.063-.15	NR[b]
Rinse-off	16	16	.13-2	NR[b]
Diluted for (bath) use	NR	NR	NR	NR[b]
Exposure type				
Eye area	NR	NR	NR	NR[b]
Incidental ingestion	NR	NR	NR	NR[b]
Incidental inhalation-spray	1; 14[a]	NR; 8[a]	NR; .063-.15[a]	NR[b]
Incidental inhalation-powder	NR	NR	NR	NR[b]
Dermal contact	1	4	NR	NR[b]
Deodorant (underarm)	NR	NR	NR	NR[b]
Hair – non-coloring	25	21	.063-2	NR[b]
Hair-coloring	NR	NR	1.2	NR[b]
Nail	NR	NR	NR	NR[b]
Mucous membrane	NR	1	NR	NR[b]
Baby products	NR	NR	NR	NR[b]

NR = Not Reported; Totals = Rinse-off + Leave-on + Diluted (for Bath) Product Uses.
[a]It is possible that these products may be sprays, but it is not specified whether the reported uses are sprays.
[b]Product formulation data submitted to the FDA in 1984, with no indication of use concentrations per product category, indicated that Quaternium-26 was used at concentrations up to 5.0%.

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