

## **Analytical Findings**

Using the GC-MS method described above for the determination of benzene, Valisure analyzed 294 unique batches from 69 brands of sunscreen and after-sun care products with the results detailed below. In summary, 78 product batches had detectable levels of benzene, 26 contained benzene in concentrations between 0.1 ppm and 2.0 ppm and 14 contained over 2 ppm. In Tables 2 – 5, an asterisk "\*" denotes data generated by the Chemical and Biophysical Instrumentation Center at Yale University from a sample from the same lot and specific product package. Two asterisks "\*\*" denotes data generated by Boston Analytical from a sample of the same lot and specific product package. For samples where benzene was detected, at least three samples from each batch were tested individually and the amount of benzene detected is reported as an average followed by the percent standard deviation of the results from replicate measurements.

**Table 2.** Product description and results of benzene analysis on various batches of sunscreen and after-sun care products in which benzene was detected at 2 ppm or higher.

Brand	Туре	Description	SPF	UPC	Lot	Ехр.	Active Pharmaceutical Ingredient(s)	Benzene	% St Dev
Name								Avg ppm	
Neutrogena	Spray	Ultra Sheer Weightless Sunscreen	100+	086800100416	04820E04	2022-01	Avobenzone 3%, Homosalate 15%, Octisalate	6.26	7%
		Spray, SPF 100+					5%, Octocrylene 10%, Oxybenzone 6%	6.77*	
Neutrogena	Spray	Ultra Sheer Weightless Sunscreen	70	086800100409	07020E01	2023-02	Avobenzone 3%, Homosalate 15%, Octisalate	5.96	7%
		Spray, SPF 70					5%, Octocrylene 4%, Oxybenzone 6%		
Neutrogena	Spray	Ultra Sheer Weightless Sunscreen	70	086800100409	06920E01	2023-02	Avobenzone 3%, Homosalate 15%, Octisalate	5.76	5%
		Spray, SPF 70					5%, Octocrylene 4%, Oxybenzone 6%		
Sun Bum	Gel	Cool Down Gel	N/A	871760002005	S0082C	_	N/A (Cosmetic Product)	5.33	3%
							,	5.49*	
Neutrogena	Spray	Ultra Sheer Weightless Sunscreen	70	086800100409	02320E01	2022-12	Avobenzone 3%, Homosalate 15%, Octisalate	5.30	2%
		Spray, SPF 70					5%, Octocrylene 4%, Oxybenzone 6%		
Neutrogena	Spray	Beach Defense Oil-Free Body	100	086800101444	04721E02	2023-01	Avobenzone 3%, Homosalate 15%, Octisalate	5.20	5%
_		Sunscreen Spray - SPF 100					5%, Octocrylene 10%, Oxybenzone 6%	5.59*	
CVS Health	Spray	After-sun Aloe Vera Soothing	N/A	050428390832	8140449A		N/A (Cosmetic Product)	4.71	1%
		Spray						4.55*	
Neutrogena	Spray	Invisible Daily Defense Body	60+	086800111542	04921E01	2024-01	Avobenzone 3%, Homosalate 10%, Octisalate	4.65	4%
J	' '	Sunscreen Broad Spectrum SPF					5%, Octocrylene 10%	5.27*	
		60+					,		
Neutrogena	Spray	Ultra Sheer Weightless Sunscreen	100+	086800100416	03120E02	2021-12	Avobenzone 3%, Homosalate 15%, Octisalate	4.11	15%
		Spray, SPF 100+					5%, Octocrylene 10%, Oxybenzone 6%	6.00**	
Neutrogena	Spray	Beach Defense Oil-Free Body	100	086800101444	28020E01	2022-09	Avobenzone 3%, Homosalate 15%, Octisalate	4.01	4%
	•	Sunscreen Spray - SPF 100					5%, Octocrylene 10%, Oxybenzone 6%	4.00*	
CVS Health	Spray	After-sun Aloe Vera Soothing	N/A	050428390832	4111849A	_	N/A (Cosmetic Product)	3.58	4%
	•	Spray					,	3.93*	
Neutrogena	Spray	Beach Defense Spray Body	50	086800112549	25520E01	2023-08	Avobenzone 3%, Homosalate 10%, Octisalate	3.52	3%
-0	•	Sunscreen SPF 50					5%, Octocrylene 10%	3.71*	
Neutrogena	Spray	Beach Defense Oil-Free Body	100	086800101444	31420E04	2022-10	Avobenzone 3%, Homosalate 15%, Octisalate	3.08	2%
	' '	Sunscreen Spray - SPF 100					5%, Octocrylene 10%, Oxybenzone 6%	2.64*	
Fruit of the	Gel	Aloe Vera Gel	N/A	071661001200	6612940A		N/A (Cosmetic Product)	2.78	6%
Earth			′				, ,	2.94*	



**Table 3.** Product description and results of benzene analysis on various batches of sunscreen and after-sun care products in which benzene was detected at 0.1 ppm to 2 ppm.

Neutrogena   Spray   Ultra Sheer Weightless Sunscreen   100+   08880010015   0420655   022-20   Avoberoone 3%, Hornosaliata 10%, Octalaitae 5%, 19   8% Octorylene 10%   00-   00-   06880010016   0420655   022-20   Avoberoone 3%, Hornosaliata 15%, Octalaitae 5%, 19   8% Octorylene 10%   00-   06880010016   0420655   022-20   Avoberoone 3%, Hornosaliata 15%, Octalaitae 5%, 19   106*	Brand Name	Туре	Description	SPF	UPC	Lot	Ехр.	Active Pharmacutical Ingredient(s)	Benzene	% St Dev
Surscreen Broad Spectrum SPF 604   0.0									Avg ppm	
Noutrogena   Suray   Ultra Sheer Weightless Sunscreen   100+   86800100416   06420E05   2022 Q2   Anotherwore 3%, Hornocalate 15%, Octosalate 5%,   1.44   67   67   68   68   68   68   68   68	Neutrogena	Spray		60+	086800111542	17820E01	2023-05			8%
Spray, SPF 100-  Spra	Neutrogena	Spray	·	100+	086800100416	06420E05	2022-02	•		6%
Baw   Elements			_					1		
Elements   Spray   After-sum Aloe Vera Soothing Spray   N/A   050428330832   101990A   - N/A (Cosmetic Product)   9.00   3%   1.04*   3%   3%   1.04*   3%   3%   3%   3%   3%   3%   3%   3	Raw	Lotion		30	858855002003	58J19	2021-07		1.35	9%
Name										
Neutrogens   Spray   Ultra Sheer Weightless Sunscreen   70   868800100409   26119E01   2022-08   Aucherszone 3%, Homosalate 15%, Octisalate 5%, 087   9%   9%   9%   9%   9%   9%   9%   9		Spray	After-sun Aloe Vera Soothing Spray	N/A	050428390832	1101990A	-	N/A (Cosmetic Product)	0.90	3%
Spray, SPF 70		. ,	, , , , , , , , , , , , , , , , , , ,	,				,	1.04*	
OX   After sun Aloe Vera Moisturizing Gel   After sun Aloe Vera Moisturizing Gel   After sun Aloe Vera Moisturizing Gel   VA   Ox   Ox   Ox   Ox   Ox   Ox   Ox   O	Neutrogena	Spray	_	70	086800100409	26119E01	2022-08	1	0.87	9%
Neutrogena   Spray   Ultra Sheer Weightless Sunscreen   Spray   SPF 100+   Sunstant   Spray   SPF 100+   Sunstant   Spray	CVS Health	Gel	1 1	N/A	050428324837	4500231A	-			2%
SunBurnt   Gel										ļ
Neutrogena   Spray   Ultra Sheer Weightless Surscreen   100+   086800100416   32619E06   2021-10   Avoberzone 3%, Homosalate 15%, Octisalate 5%,   0.73   9%   0.73   9%   0.73	Neutrogena	Spray		100+	086800100416	08119F36	2022-02		0.77	4%
Neutrogena   Spray   Ultra Sheer Weightless Surscreen   100+ 086800100416   32619E06   2021-10   Avoberzone 3%, Homosalate 15%, Octisalate 5%, 0.73   9% Octocylene 10%, Oxberzone 6%   0.73   9% Octocylene 10%, Oxberzone 6%   0.74   4% Octocylene 10%, Oxberzone 5%   0.71   4% Octocylene 10%   0.72	SunBurnt	Gel	Advanced After-Sun Gel	N/A	324330210060	62R20	2022-12	N/A (Cosmetic Product)	0.75	2%
Spray, SPF 100+   Spray, SPF 100+   Spray Spray   Sp									0.87*	
Coolderses	Neutrogena	Spray	_	100+	086800100416	32619E06	2021-10	1	0.73	9%
Neutrogena   Spray   CoolDry Sport Water-Resistant   Sumscreen Spray SPF 70   See Sport Water-Resistant   Sumscreen Spray SPF 30 Spray   See Sport Water-Resistant   Sumscreen Spray SPF 30   See Sport Spray SPF 30 Spray SPF 30 Spray SPF 30 Spray SPF 30   See Sport Spray SPF 30 Spray SPF 30 Spray SPF 30 Spray SPF 30   See Spray SPF 30	Goodsense	Lotion	• •	30	846036001143	070606920	2022-07		0.71	4%
Neutrogena   Spray   CoolDry Sport Water-Resistant   Spray   CoolDry Sport Water-Resistant   Spray   CoolDry Sport Water-Resistant   Spray   Spray   Ultra Sheer Body Mist Sunscreen   Spray   Ultra Sheer Body Mist Sunscreen   Spray   Spr										1,75
Neutrogena   Spray   Ultra Sheer Body   Mist Sunscreen   100   086800101444   35219E02   2021-09   Avobenzone 3%, Homosalate 15%, Octisalate 5%, 0.41   7% Octocrylene 10%, Oxybenzone 6%   0.41	Neutrogena	Sprav	CoolDry Sport Water-Resistant	70	086800100379	33719E01	2022-10	·	0.66	5%
Neutrogena   Spray   Ultra Sheer Body Mist Sunscreen   Spray   Banana Boat   Spray   Kids Max Protect & Play Sunscreen C   Spray SPF 100   Spray SPF 100   Beach Defense Oil-Free Body   Sunscreen Spray SPF 100   Defense Spray SPF 100   Defense Oil-Free Body   Sunscreen Spray SPF 100   Defense Oil-Free Body Sunscreen Spray SPF 100   Defense Oil-Free Body Sunscreen Spray SPF 100   Defense Oil-Free Body Sunscreen Spray SPF 100   Defense Oil-Free Body Sunscreen Spray SPF 100   Defense Oil-Free Body Sunscreen Spray SPF 100   Defense Oil-Free Body Sunscreen Spray SPF 100   Defense Oil-Free Spray SPF 1		-17	, ,	-				1		
Banana Boat   Spray   Kids Max Protect & Play Sunscreen C-   100   079656050820   200910346   2023-02   Avoberazone 3%, Homosalate 10%, Oxtisalate 5%,   0.41   7%   0.42   0.4	Neutrogena	Spray	· · ·	30	086800100386	28219E02	2021-09		0.49	18%
Banana Boat   Spray   Kids Max Protect & Play Sunscreen C   100   079656050820   200910346   2023-02   Avobenzone 3%, Hormosalate 10%, Octisalate 5%,   0.41   7%   07000000000000000000000000000000	· ·	. ,								
Spray   Spray   Beach Defense Oil-Free Body   Spray   Sunscreen Spray - SPF 100   Se8800101444   35219E05   2021-11   Avobenzone 3%, Homosalate 15%, Octisalate 5%, O.41   8%   Sunscreen Spray - SPF 100   Spray   Ultra Sheer Weightless Sunscreen   100+ 086800100416   29519E02   2021-09   Avobenzone 3%, Homosalate 15%, Octisalate 5%, O.37   2%   Octoorylene 10%, Oxybenzone 6%   0.38   Octoorylene 10%, O	Banana Boat	Spray		100	079656050820	200910346	2023-02	Avobenzone 3%, Homosalate 10%, Octisalate 5%,	0.41	7%
Sunscreen Spray - SPF 100   Decotorylene 10%, Oxybenzone 6%   Decotoryle		. ,	•					Octocrylene 10%, Oxybenzone 6%	0.43*	
Sunscreen Spray - SPF 100   Decotorylene 10%, Oxybenzone 6%   Decotoryle	Neutrogena	Spray	Beach Defense Oil-Free Body	100	086800101444	35219E05	2021-11		0.41	8%
Spray   Ultra Sport Clear Spray SPF 40	•							Octocrylene 10%, Oxybenzone 6%		
Banana Boat         Spray         UltraMist Deep Tanning Dry Oil Continuous Clear Spray SPF 4         4         79656046632         200944022         2023-03         Homosalate 3.0%, Octoorylene 1.0%         0.36         18%           Banana Boat         Spray         Kids Max Protect & Play Sunscreen C-Spray SPF 100         100         079656050820         200273634         2022-12         Avobenzone 3%, Homosalate 10%, Octisalate 5%, Octisalate 5%, Octisalate 5%, Octisalate 5%, Octisalate 5%, Pray Spr 100         10%         086800100409         13019F84         2022-04         Avobenzone 3%, Homosalate 15%, Octisalate 5%, Octisalate 5%, Octisalate 5%, Octisalate 5%, Oxybenzone 6%         0.18         10%           Neutrogena         Spray         Ultra Sheer Body Mist Sunscreen Broad Spectrum SPF 45         45         086800100393         15719F83         2022-05         Avobenzone 3%, Homosalate 15%, Octisalate 5%, Octisalate 5%, Octisalate 5%, Octoorylene 2.35%, Oxybenzone 6%         0.15         12%           Neutrogena         Spray         Ultra Sport Clear Sunscreen Spray SPF 100         79656050806         201060792         2023-03         Avobenzone 3.0%, Homosalate 15%, Octisalate 5%, Oxybenzone 6.0%         0.15         4%           Neutrogena         Lotion         Ultra Sport Clear Sunscreen Spray SPF 70         86800687702         009010069         2022-05         Avobenzone 3.0%, Homosalate 15%, Oxybenzone 6.0%         0.13         73%     <	Neutrogena	Spray	Ultra Sheer Weightless Sunscreen	100+	086800100416	29519E02	2021-09	Avobenzone 3%, Homosalate 15%, Octisalate 5%,	0.37	2%
Continuous Clear Spray SPF 4   Continuous Clear Spray SPF 50   Cotorylene 10%, Oxybenzone 3%, Homosalate 10%, Octisalate 5%, O19   11% Spray SPF 100   Cotorylene 10%, Oxybenzone 6%   Cotorylen			Spray, SPF 100+					Octocrylene 10%, Oxybenzone 6%	0.38*	
Banana Boat Spray         Kids Max Protect & Play Sunscreen C-Spray SPF 100         100         079656050820         200273634         2022-12         Avobenzone 3%, Homosalate 10%, Octisalate 5%, Octisalate 5%, Octosylene 10%, Oxybenzone 6%         0.19         11%           Neutrogena         Spray         Ultra Sheer Weightless Sunscreen Spray, SPF 70         70         086800100409         13019F84         2022-04         Avobenzone 3%, Homosalate 15%, Octisalate 5%, Octosylene 4%, Oxybenzone 6%         0.18         10%           Neutrogena         Spray         Ultra Sheer Body Mist Sunscreen Broad Spectrum SPF 45         45         086800100393         15719F83         2022-05         Avobenzone 3%, Homosalate 15%, Octisalate 5%, Octisalate 15%, Octisalate 15%, Octisalate 100         0.15         12%           Banana Boat Spray         Ultra Sport Clear Sunscreen Spray SPF 45         100         79656050806         201060792         2023-03         Avobenzone 3.0%, Homosalate 10.0%, Oxybenzone 6.0%         0.15         4%           Neutrogena Iotion         Ultra Sheer Dny-Touch Water Resistant Sunscreen SPF 70         86800687702         0090L0069         2022-06         Avobenzone 3.0%, Homosalate 15.0%, Octisalate 15.0%, Octisalate 5.0%, Oxybenzone 6.0%         0.13         73%           Neutrogena Spray         Spray         CoolDry Sport Water-Resistant Sunscreen Spray SPF 50         086800100362         15619F25         2022-05 <t< td=""><td>Banana Boat</td><td>Spray</td><td> ,</td><td>4</td><td>79656046632</td><td>200944022</td><td>2023-03</td><td>Homosalate 3.0%, Octocrylene 1.0%</td><td>0.36</td><td>18%</td></t<>	Banana Boat	Spray	,	4	79656046632	200944022	2023-03	Homosalate 3.0%, Octocrylene 1.0%	0.36	18%
Spray SPF 100   Spray SPF 100   Spray Spray   Ultra Sheer Weightless Sunscreen Spray SPF 70   O86800100409   13019F84   2022-04   Avobenzone 3%, Homosalate 15%, Octisalate 5%, Octocrylene 4%, Oxybenzone 6%   Octocrylene 2.35%, Oxybenzone 6.0%   Octocrylene 2.35%, Oxybenzone 6%   Octocrylene 2.35%, Oxybenzone 6.0%   Octocrylene 2.35%, Oxybenzone 6.0%   Octocrylene 2.35%, Oxybenzone 6.0%   Octocrylene 2.35%, Oxybenzone 6.0%   Octocrylene 10.0%, Oxybenz	Banana Boat	Spray		100	079656050820	200273634	2022-12	Avobenzone 3%, Homosalate 10%, Octisalate 5%	0.19	11%
Neutrogena         Spray Spray         Ultra Sheer Weightless Sunscreen Spray, SPF 70         70         086800100409         13019F84         2022-04         Avobenzone 3%, Homosalate 15%, Octisalate 5%, Octoorylene 4%, Oxybenzone 6%         0.18         10%           Neutrogena         Spray         Ultra Sheer Body Mist Sunscreen Broad Spectrum SPF 45         45         086800100393         15719F83         2022-05         Avobenzone 3%, Homosalate 15%, Octisalate 5%, Octisalate 5%, Octisalate 5%, Octionylene 2.35%, Oxybenzone 6%         0.15         12%           Banana Boat Spray         Ultra Sport Clear Sunscreen Spray SPF 100         79656050806         201060792         2023-03         Avobenzone 3.0%, Homosalate 10.0%, Oxtisalate 10.0%,	Daniana Doac	op.u,	•		07505055525	2002/0001		1	0.23	11,0
Spray, SPF 70   Spray   Ultra Sheer Body Mist Sunscreen Broad Spectrum SPF 45   D86800100393   15719F83   2022-05   Avobenzone 3%, Homosalate 15%, Octisalate 5%, Octisalate 5%, Octocrylene 2.35%, Oxybenzone 6%   D15   12% Octocrylene 2.35%, Oxybenzone 6%   D15	Neutrogena	Spray		70	086800100409	13019F84	2022-04		0.18	10%
Neutrogena         Spray Broad Spectrum SPF 45         Ultra Sheer Body Mist Sunscreen Broad Spectrum SPF 45         45         086800100393         15719F83         2022-05         Avobenzone 3%, Homosalate 15%, Octisalate 5%, Octocrylene 2.35%, Oxybenzone 6%         0.15         12%           Banana Boat 100         Spray Ultra Sport Clear Sunscreen Spray SPF 100         79656050806         201060792         2023-03         Avobenzone 3.0%, Homosalate 10.0%, Oxybenzone 6.0%         0.15         4%           Neutrogena Buttogena Boat Park Banana Boat 100         Ultra Sheer Dry-Touch Water Besistant Sunscreen SPF 70         70         86800687702         0090L0069         2022-06         Avobenzone 3.0%, Homosalate 15.0%, Octisalate 5.0%, Oxybenzone 6.0%         0.13         73%           Neutrogena Resistant Sunscreen SPF 70         Spray CoolDry Sport Water-Resistant Sunscreen Spray SPF 50         50         086800100362         15619F25         2022-05         Avobenzone 2.7%, Homosalate 9%, Octisalate 9%, Octisalate 4.5%, Octoorylene 6%, Oxybenzone 4.5%         0.13         4%           TopCare Everyday         Lotion Top Care Spray SPF 50         Ultimate Sheer Sunscreen Lotion SPF 70         036800459007         9533119A         2021-11         Avobenzone 3%, Homosalate 10%, Octisalate 9%, Octisalate 9%, Octisalate 9%, Octionsalate 10%, Octionsalate 10%, Octisalate 9%, Octisalate 9%, Octionsalate 10%, Octionsalate 10%, Octionsalate 10%, Octionsalate										
Banana Boat Spray Ultra Sport Clear Sunscreen Spray SPF 100 79656050806 100 79	Neutrogena	Sprav		45	086800100393	15719F83	2022-05		0.15	12%
Banana Boat Spray Ultra Sport Clear Sunscreen Spray SPF 100 79656050806 201060792 2023-03 Avobenzone 3.0%, Homosalate 10.0%, Oxybenzone 6.0%  Neutrogena Lotion Ultra Sheer Dry-Touch Water Resistant Sunscreen SPF 70 86800687702 0090L0069 2022-06 Avobenzone 3.0%, Homosalate 15.0%, Oxtisalate 5.0%, Oxtocrylene 2.8%, Oxybenzone 6.0%  Neutrogena Spray CoolDry Sport Water-Resistant Sunscreen SPF 50 086800100362 15619F25 2022-05 Avobenzone 2.7%, Homosalate 9%, Octisalate 4.5%, Oxtocrylene 6%, Oxybenzone 4.5%  TopCare Lotion Spray Ultra Sheer Sunscreen Lotion SPF 70 036800459007 9533119A 2021-11 Avobenzone 3%, Homosalate 100%, Oxtisalate 3%, O.12 6% 0.16*  EltaMD Spray UV Aero Broad-Spectrum Full-Body Sunscreen Spray, SPF 45 45 390205025879 67155H 2022-11 Zinc Oxide 9.3%, Octinoxate 7.5% 0.11 9% Spray Spray Spray, SPF 45		-17	1 · · · · · · · · · · · · · · · · · · ·					1		
Neutrogena Lotion Viltra Sheer Dry-Touch Water Resistant Sunscreen SPF 70 86800100362 15619F25 2022-05 Avobenzone 3.0%, Homosalate 15.0%, Oxtisalate 9%, Octisalate 9%, Octisalate 9%, Oxtisalate 9%, Octisalate 4.5%, Octoorylene 6.0% 2022-05 Avobenzone 2.7%, Homosalate 9%, Octisalate 9%, Octionalate 9%, Octisalate 9%, Octisalate 9%, Octisalate 9%, Octionalate 9%, Octisalate 9%, Octisalate 9%, Octionalate 9%, Octisalate 9%, Octionalate 9%, Octiona	Banana Boat	Spray	Ultra Sport Clear Sunscreen Spray SPF	100	79656050806	201060792	2023-03	·	0.15	4%
Neutrogena Lotion Ultra Sheer Dry-Touch Water Resistant Sunscreen SPF 70  Neutrogena Spray CoolDry Sport Water-Resistant Sunscreen Lotion SPF 50  TopCare Lotion Everyday Spray UV Aero Broad-Spectrum Full-Body Sunscreen Spray, SPF 45  EltaMD Spray UV Aero Broad-Spectrum Full-Body Sunscreen Spray, SPF 45  Neutrogena Spray SPF 50  Ae8800687702 0090L0069 2022-06 Avobenzone 3.0%, Homosalate 15.0%, Octisalate 5.0%, Octocrylene 2.8%, Oxybenzone 6.0%  Avobenzone 2.7%, Homosalate 9%, Octisalate 4.5%, Octocrylene 6%, Oxybenzone 4.5%  Avobenzone 2.7%, Homosalate 9%, Octisalate 9%, Octisalate 9%, Octisalate 9%, Octisalate 9%, Octisalate 9%, Octionalate 10%, Octisalate 3%, Octocrylene 6%, Oxybenzone 6%  Spray UV Aero Broad-Spectrum Full-Body Sunscreen Spray, SPF 45  EltaMD Spray UV Aero Broad-Spectrum Full-Body Sunscreen Spray, SPF 45		. ,	100					1		
Resistant Sunscreen SPF 70  Neutrogena Spray CoolDry Sport Water-Resistant Sunscreen SPF 50  Neutrogena Lotion Properties Spray SPF 50  TopCare Lotion Spray	Neutrogena	Lotion	Ultra Sheer Dry-Touch Water	70	86800687702	0090L0069	2022-06	Avobenzone 3.0%, Homosalate 15.0%, Octisalate	0.13	73%
Sunscreen Spray SPF 50   Sunscreen Spray SPF 45   Sunscreen Spray SPF	-							5.0%, Octocrylene 2.8%, Oxybenzone 6.0%		
Sunscreen Spray SPF 50   Sunscreen Spray SPF 50   Sunscreen Spray SPF 50   Sunscreen Lotion SPF 20   O36800459007   P33119A   2021-11   Avobenzone 3%, Homosalate 10%, Octisalate 3%, O.12   6%   Octoorylene 7%, Oxybenzone 6%   O.16   Octoorylene 7%, Oxybenzone 6%   O.17   Octoorylene 7%, Oxybenzone 6%   O.16   Octoorylene 7%, Oxybenzone 6%   Octoorylene 7%, Oxybenzone 6%   O.16   Octoorylene 7%, Oxybenzone 6%   Octoorylene 7%, Oxybenzone	Neutrogena	Spray	CoolDry Sport Water-Resistant	50	086800100362	15619F25	2022-05	Avobenzone 2.7%, Homosalate 9%, Octisalate	0.13	4%
Everyday         70         Octoorylene 7%, Oxybenzone 6%         0.16*           EltaMD         Spray         UV Aero Broad-Spectrum Full-Body Sunscreen Spray, SPF 45         45         390205025879         67155I         2022-11         Zinc Oxide 9.3%, Octinoxate 7.5%         0.11         18%           EltaMD         Spray         UV Aero Broad-Spectrum Full-Body Sunscreen Spray, SPF 45         45         390205025879         67155H         2022-11         Zinc Oxide 9.3%, Octinoxate 7.5%         0.11         9%			Sunscreen Spray SPF 50					4.5%, Octocrylene 6%, Oxybenzone 4.5%		
EltaMD         Spray         UV Aero Broad-Spectrum Full-Body Sunscreen Spray, SPF 45         45         390205025879         67155I         2022-11         Zinc Oxide 9.3%, Octinoxate 7.5%         0.11         18%           EltaMD         Spray         UV Aero Broad-Spectrum Full-Body Sunscreen Spray, SPF 45         45         390205025879         67155H         2022-11         Zinc Oxide 9.3%, Octinoxate 7.5%         0.11         9%	TopCare	Lotion	Ultimate Sheer Sunscreen Lotion SPF	70	036800459007	9533119A	2021-11	Avobenzone 3%, Homosalate 10%, Octisalate 3%,	0.12	6%
Sunscreen Spray, SPF 45   Sunscreen Spray,	Everyday		70					Octocrylene 7%, Oxybenzone 6%	0.16*	
EltaMD Spray UV Aero Broad-Spectrum Full-Body Sunscreen Spray, SPF 45 45 390205025879 67155H 2022-11 Zinc Oxide 9.3%, Octinoxate 7.5% 0.11 9%		Spray	UV Aero Broad-Spectrum Full-Body	45	390205025879	67155I	2022-11	Zinc Oxide 9.3%, Octinoxate 7.5%	0.11	18%
Sunscreen Spray, SPF 45			Sunscreen Spray, SPF 45						0.17*	
	EltaMD	Spray	1	45	390205025879	67155H	2022-11	Zinc Oxide 9.3%, Octinoxate 7.5%	0.11	9%
	Ranana Roat	Spray	· ''	100	079656050820	200243635	2022-12	Avobenzone 3%, Homosalate 10%, Octisalate 5%,	0.11	19%
Spray SPF 100 Octocrylene 10%, Oxybenzone 6%		,	•						1	



**Table 4.** Product description and results of benzene analysis on various batches of sunscreen and after-sun care products in which benzene was detected at below LLOQ.

Brand Name	Туре	Description	SPF	UPC	Lot	Ехр.	Active Pharmaceutical Ingredient(s)	Benzene Avg ppm	% St Dev
Live Better by CVS Health	Spray	Body Mineral Spray Sunscreen SPF 50	50	050428538913	4270950B	2022-03	Titanium Dioxide 3.5%, Zinc Oxide 7.25%	<0.1	5%
CVS Health	Lotion	Ultra Sheer Broad Spectrum Sunscreen Lotion SPF 100 (050428415528)	100	050428616062	5881760A	2022-06	Avobenzone 3%, Homosalate 15%, Octisalate 5%, Octocrylene 10%, Oxybenzone 6%	< 0.1	1%
Ethical Zinc	Lotion	Natural Clear Zinc Sunscreen SPF 50+	50+	9354028000025	A0747	2022-09	Zinc Oxide 22.0%	< 0.1	25%
Banana Boat	Spray	Protective Dry Oil Clear Sunscreen Spray with Coconut Oil SPF 15	15	79656044836	202023826	2023-06	Avobenzone 1.5%, Homosalate 5.0%, Octocrylene 3.5%	< 0.1	11%
Babyganics	Spray	Kid's Sunscreen Continuous Spray - SPF 50	50+	813277017554	3713449A	2021-12	Octisalate 5%, Zinc Oxide 15%	< 0.1	24%
Walgreens	Lotion	Sport Lotion Sunscreen SPF 50	50	049022977464	2142499A	2021-09	Avobenzone 3%, Homosalate 10%, Octisalate 4.5%, Octocrylene 8%	< 0.1	12%
Banana Boat	Spray	Ultra Defense Ultra Mist Clear Sunscreen Spray SPF 100	100	079656050813	191932590	2022-06	Avobenzone 3%, Homosalate 10%, Octisalate 5%, Octocrylene 10%, Oxybenzone 6%	< 0.1	11%
CVS Health	Lotion	Ultra Sheer Lotion Broad Spectrum Sunscreen SPF 45	45	050428620083	6060370C	2022-02	Avobenzone 3.0%, Homosalate 10.0%, Octisalate 5.0%, Octocrylene 2.8%	< 0.1	3%
Raw Elements	Lotion	Eco Formula Sunscreen Lotion Tin SPF 30	30	858855002065	21J19	2021-07	Zinc Oxide 23%	< 0.1	11%
Coppertone	Spray	Whipped Sunscreen Lotion Spray SPF 50	50	041100007094	9J03CS	2021-08	Avobenzone 3%, Homosalate 9%, Octisalate 4.5%, Octocrylene 9%	< 0.1	10%
CVS Health	Lotion	Ultra Sheer Broad Spectrum Sunscreen Lotion SPF 100 (050428415528)	100	050428616062	7470720B	2022-03	Avobenzone 3%, Homosalate 15%, Octisalate 5%, Octocrylene 10%, Oxybenzone 6%	< 0.1	7%
CVS Health	Lotion	70 Beach Guard Sun Sunscreen SPF 70	70	050428402528	5980339C	2022-01	Avobenzone 3%, Homosalate 10%, Octisalate 5%, Octocrylene 4.5%, Oxybenzone 4%	< 0.1	70%
Max Block	Lotion	Sunscreen Lotion 4 Fl Oz Broad Spectrum Water Resistant SPF 30	30	639277292865	91047	2022-01	Avobenzone 3%, Homosalate 7.5%, Octisalate 5%, Octocrylene 5%	< 0.1	70%
Walgreens	Lotion	Broad Spectrum Sport SPF 50 Sunscreen	50	049022977471	4440660B	2022-03	Avobenzone 3%, Homosalate 10%, Octisalate 4.5%, Octocrylene 8%	< 0.1	10%
CVS Health	Lotion	Ultra Sheer Broad Spectrum Sunscreen Lotion SPF 100 (050428415528)	100	050428616062	1362040A	2022-07	Avobenzone 3.0%, Homosalate 15.0%, Octisalate 5.0%, Octocrylene 10.0%, Oxybenzone 6.0%	< 0.1	4%
TopCare Everyday	Lotion	Sport Sunscreen Lotion SPF 70	70	036800456303	0440090A	2023-01	Avobenzone 3%, Homosalate 10%, Octisalate 3%, Octocrylene 7%, Oxybenzone 6%	< 0.1	27%
Max Block	Lotion	Sport Sunscreen Lotion Water Resistance Blue 30 SPF	30	639277292063	00189	2022-03	Avobenzone 3%, Homosalate 7.5%, Octisalate 5%, Octocrylene 5%	< 0.1	7%
Walgreens	Lotion	Sunscreen Sport SPF 50	50	049022977457	3232629A	2021-09	Avobenzone 3%, Homosalate 10%, Octisalate 4.5%, Octocrylene 8%	< 0.1	10%
Max Block	Lotion	Sunscreen Lotion 4 Fl Oz Broad Spectrum Water Resistant SPF 30	30	639277292865	91188	2021-12	Avobenzone 3%, Homosalate 7.5%, Octisalate 5%, Octocrylene 5%	< 0.1	51%
Max Block	Lotion	Sunscreen Lotion 4 Fl Oz Broad Spectrum Water Resistant SPF 30	30	639277292865	91188B	2021-12	Avobenzone 3%, Homosalate 7.5%, Octisalate 5%, Octocrylene 5%	< 0.1	7%
Banana Boat	Spray	Kids Sport Sunscreen Lotion Spray SPF 50	50	079656020526	192546543	2022-08	Avobenzone 3%, Homosalate 10%, Octisalate 5%, Octocrylene 6%	< 0.1	19%
TopCare Everyday	Lotion	Ultimate Sheer Sun Lotion Sunscreen SPF 55	55	036800456242	9543129A	2021-11	Avobenzone 3%, Homosalate 10%, Octisalate 5%, Octocrylene 7%	< 0.1	9%



Solimo	Lotion	Sheer Face Sunscreen Lotion SPF 55 (842379152474 UPC Description)	55	842379167430	0495376	2022-07	Avobenzone 3%, Homosalate 12%, Octisalate 5%, Octocrylene 10%	< 0.1	6%
Max Block	Lotion	Sport Sunscreen Lotion Water Resistance Blue 30 SPF	30	639277292063	91051	2022-02	Avobenzone 3%, Homosalate 7.5%, Octisalate 5%, Octocrylene 5%	< 0.1	39%
Walgreens	Lotion	Sunscreen Sport SPF 50	50	049022977457	3222629B	2021-09	Avobenzone 3%, Homosalate 10%, Octisalate 4.5%, Octocrylene 8%	< 0.1	10%
Neutrogena	Lotion	Sheer Zinc Dry-Touch Face Sunscreen SPF 50	50	086800110811	2979L1236	2022-03	Zinc Oxide 21.6%	< 0.1	8%
CVS Health	Spray	Sport Clear Spray Sunscreen SPF 100+	100+	050428618868	7062049B	2021-07	Avobenzone 3%, Homosalate 15%, Octinoxate 2%, Octisalate 5%, Octocrylene 10%, Oxybenzone 6%	< 0.1	39%
La Roche- Posay	Spray	Anthelios Sunscreen Lotion Spray SPF 60	60	883140500841	201401230	2022-02	Avobenzone 2.68%, Homosalate 9.60%, Octisalate 2.88%, Octocrylene 5.38%, Oxybenzone 3.46%	< 0.1	79%
Banana Boat	Spray	Simply Protect Kids Sunscreen Spray SPF 50+	50	079656024500	193639916	2022-11	Avobenzone 3%, Homosalate 9%, Octisalate 4.5%, Octocrylene 6%	< 0.1	7%
Equate	Lotion	Kids Broad Spectrum Sunscreen Lotion, SPF 50	50	681131002462	3941300A	2023-05	Titanium Dioxide 3.1%, Zinc Oxide 4.0%	< 0.1	13%
CVS Health	Spray	Sheer Mist Spray Broad Spectrum Uva/Uvb Cont. Spray Sunscreen SPF 70	70	050428449240	2700189A	2022-01	Avobenzone 3%, Homosalate 15%, Octisalate 5%, Octocrylene 4%, Oxybenzone 6%	< 0.1	15%
Max Block	Lotion	Sport Sunscreen Lotion Water Resistance Blue 30 SPF	30	639277292063	91186	2021-12	Avobenzone 3%, Homosalate 7.5%, Octisalate 5%, Octocrylene 5%	< 0.1	5%
Neutrogena	Spray	Ultra Sheer Weightless Sunscreen Spray, SPF 70	70	086800100409	32318F63	2021-10	Avobenzone 3%, Homosalate 15%, Octisalate 5%, Octocrylene 4%, Oxybenzone 6%	< 0.1	9%
Sun Bum	Lotion	Oxy Free Zinc Oxide Sunscreen Lotion - SPF 50	50	871760003903	S9351AN	2021-12	Homosalate 10%, Octisalate 5%, Octocrylene 10%, Zinc Oxide 7%	< 0.1	24%
Aveeno	Lotion	Baby Continuous Protection Sensitive Skin Sunscreen Lotion Broad Spectrum SPF 50	50	381371164509	2419L1022	2022-02	Zinc Oxide 21.6%	< 0.1	58%
Sun Bum	Spray	After Sun Cool Down Aloe Vera Spray	N/A	871760003187	S1039D	-	N/A (Cosmetic Product)	< 0.1	6%
Walgreens	Gel	After Sun Gel	N/A	049022507326	0701970A	-	N/A (Cosmetic Product)	< 0.1	2%
Up & Up	Gel	Clear Aloe Vera Gel	N/A	371661826163	9701930A	-	N/A (Cosmetic Product)	< 0.1	16%

**Table 5.** Product description of various batches of sunscreen for which benzene was not detected through initial analysis of at least one sample from each batch. Due to length of this table, it is contained in <u>Attachment A</u> to this Petition.

## Recall Request and Other Actions

This Petition seeks to have the Commissioner and FDA request recalls for the identified batches of sunscreen products, consistent with FDA's mandate to ensure the safety of the drug supply in America. The 40 batches in <u>Table 2</u> and <u>Table 3</u> have significantly detected benzene and should be recalled.

Such recalls are important for public safety. As indicated in <u>Tables 2 - 5</u>, there is significant batch-to-batch variation in benzene content, but many batches of sunscreen contain no detectable