

Work Group Meeting 8:

- ❖ Body Wash/Mousse/Gel/Soap/Foam/Scrub
- ❖ General Use Hand or Body Cleaner Soap
 - ❖ Hand and Body Conditioner, Cream, Lotion, or Moisturizer
 - ❖ Mouthwash/Rinse

June 18, 2019
10:00 am-12:00pm



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Work Group Outline


Category Order: Body Wash/Mousse/Gel/Soap/Foam/Scrub; General Use Hand or Body Cleaner Soap; Hand and Body Conditioner, Cream, Lotion, or Moisturizer; & Mouthwash/Rinse

For Each Category Presented

- ❖ Category Definition
- ❖ Category Overview
 - ❖ Companies
 - ❖ Products
 - ❖ VOC Content
 - ❖ Product Weighted Maximum Incremental Reactivity (PWMIR)
 - ❖ Ozone Forming Potential (OFP)
- ❖ Product Groups
- ❖ VOC Breakdown
- ❖ Possible VOC Thresholds
 - ❖ Regulatory Pathways
- ❖ Discussion and Questions

What's Next?

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**Email questions during the meeting to:
josh.berghouse@arb.ca.gov**

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**Body Wash/Mousse/
Gel/Soap/Foam/Scrub**

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Body Wash/Mousse/Gel/Soap/Foam/Scrub

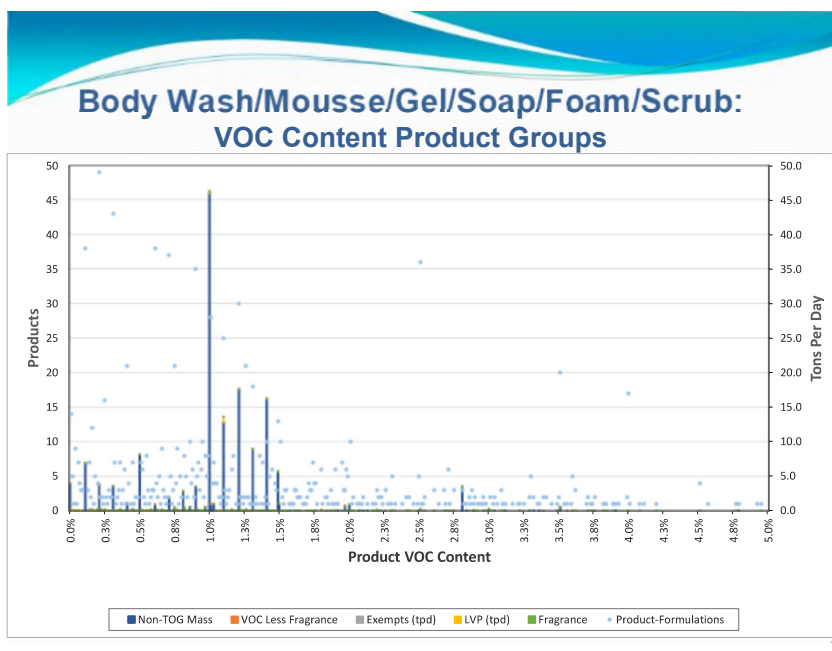
- ❖ “General-use Hand or Body Cleaner or Soap” means a cleaner or soap designed to be used routinely on the skin to clean or remove typical or common dirt and soils. “General-use Hand or Body Cleaner or Soap” includes but is not limited to, hand or body washes, dual purpose shampoo-body cleaners, shower or bath gels, and moisturizing cleaners or soaps. “General-use Hand or Body Cleaner or Soap” does not include prescription drug products, “Antimicrobial Hand or Body Cleaner or Soap,” “Astringent/Toner,” “Facial Cleaner or Soap,” “Hand Dishwashing Detergent” (including antimicrobial), “Heavy-duty Hand Cleaner or Soap,” “Medicated Astringent/Medicated Toner,” or “Rubbing Alcohol.”
- ❖ Body Wash/Mousse/Gel/Soap/Foam/Scrub is a specialized liquid product used for cleaning the body during showers. Not to be confused with liquid soaps, Body Washes/Mousses/Gels/Soaps/Foams/Scrubs, in fact, do not contain saponified oil. Instead, it uses synthetic detergents derived from either petroleum or plant sources.

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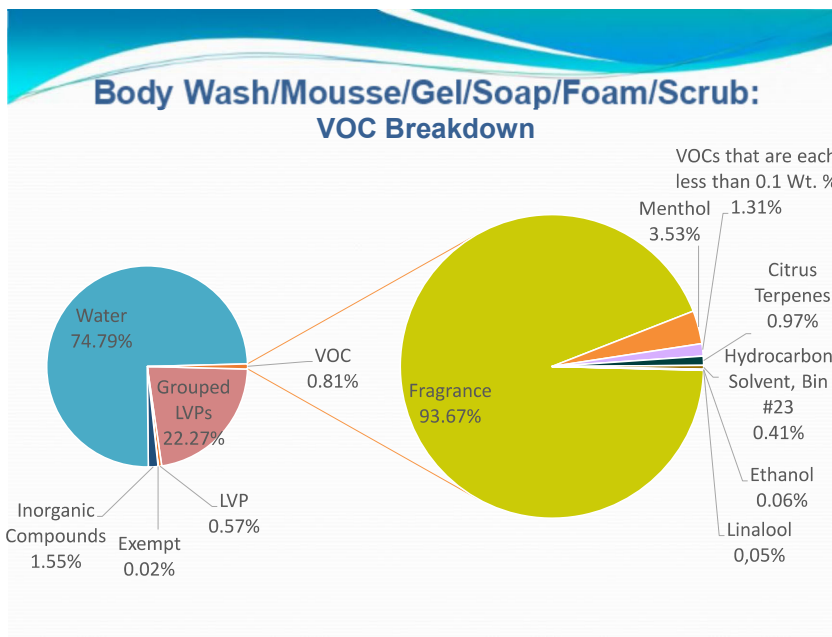
Body Wash/Mousse/Gel/Soap/Foam/Scrub: Category Overview

Reporting Companies	286
Reported Products	7782
SWA-VOC Content	1.06%
VOC (tpd)	1.28
PWMIR	0.06
TOG MIR	4.28

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Body Wash/Mousse/Gel/Soap/Foam/Scrub: Possible VOC Thresholds

Possible VOC Limit	0.25%	0.50%	0.75%	1.00%	1.25%	1.50%	1.75%	2.00%
VOC Tons Per Day Reduced	1.07	0.85	0.64	0.43	0.33	0.24	0.15	0.06
Complying Market Share (Product Formulations)	7%	7%	7%	53%	53%	53%	53%	80%
Complying Market Share (Mass)	3%	3%	3%	55%	55%	55%	55%	97%

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Discussion & Questions

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General Use Hand or Body Cleaner Soap

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General Use Hand or Body Cleaner Soap

“General-use Hand or Body Cleaner or Soap” means a cleaner or soap designed to be used routinely on the skin to clean or remove typical or common dirt and soils. “General-use Hand or Body Cleaner or Soap” includes but is not limited to, hand or body washes, dual purpose shampoo-body cleaners, shower or bath gels, and moisturizing cleaners or soaps. “General-use Hand or Body Cleaner or Soap” does not include prescription drug products, “Antimicrobial Hand or Body Cleaner or Soap,” “Astringent/Toner,” “Facial Cleaner or Soap,” “Hand Dishwashing Detergent” (including antimicrobial), “Heavy-duty Hand Cleaner or Soap,” “Medicated Astringent/ Medicated Toner,” or “Rubbing Alcohol.”

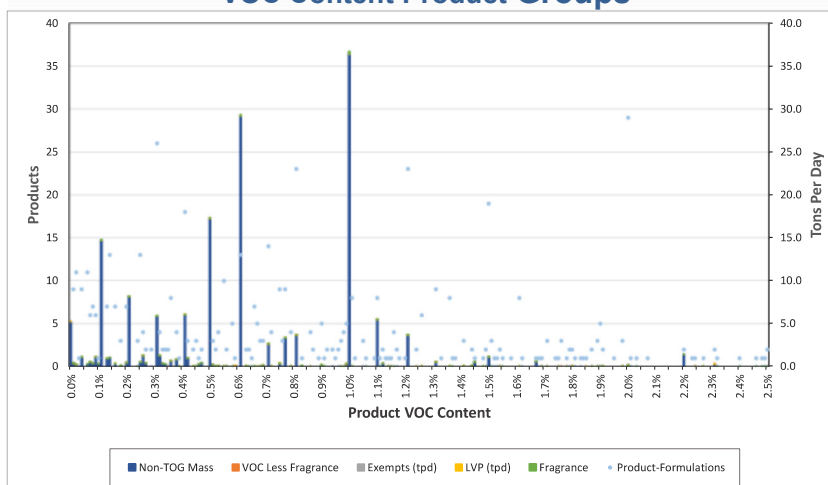
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General Use Hand or Body Cleaner Soap: Category Overview

Reporting Companies	240
Reported Products	4,469
SWA-VOC Content	0.63%
VOC (tpd)	0.76
PWMIR	0.03
TOG MIR	5.85

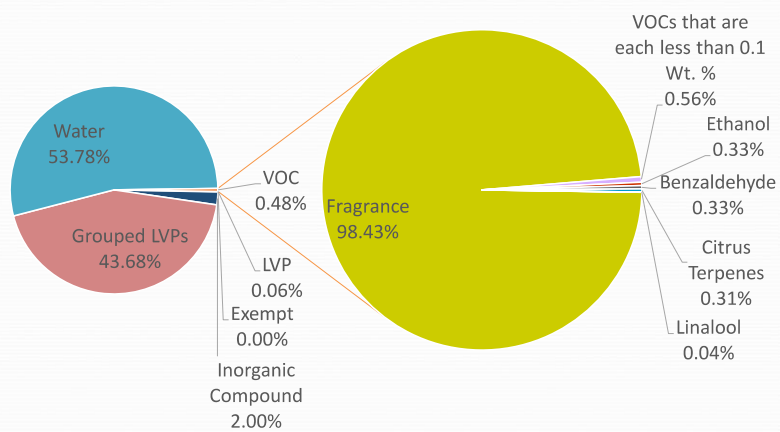
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General Use Hand or Body Cleaner Soap: VOC Content Product Groups



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General Use Hand or Body Cleaner Soap: VOC Breakdown



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General Use Hand or Body Cleaner Soap: Possible VOC Thresholds

Possible VOC Limit	0.25%	0.50%	0.75%	1.00%	1.25%	1.50%	1.75%	2.00%
VOC Tons Per Day Reduced	0.59	0.42	0.25	0.08	0.06	0.05	0.03	0.01
Complying Market Share (Product Formulations)	9%	9%	9%	70%	70%	70%	70%	70%
Complying Market Share (Mass)	3%	3%	3%	91%	91%	91%	91%	99%

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Discussion & Questions

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Hand and Body Conditioner, Cream, Lotion, and Moisturizer

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Hand and Body Conditioner, Cream, Lotion, and Moisturizer

- ❖ Hand and Body Creams are semi-solid emulsions of oil and water. They are divided into two types: oil-in-water creams which are composed of small droplets of oil dispersed in a continuous water phase, and water-in-oil creams which are composed of small droplets of water dispersed in a continuous oily phase. Oil-in-water creams are more comfortable and cosmetically acceptable as they are less greasy and more easily washed off using water.
- ❖ A lotion is a low-viscosity topical preparation intended for application to the skin. By contrast, creams and gels have higher viscosity, typically due to lower water content. While a lotion may be used as a medicinal delivery system, many lotions (especially hand lotions and body lotions) are meant instead to simply smooth, moisturize, soften and perhaps perfume the skin.

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Hand and Body Conditioner, Cream, Lotion, and Moisturizer: Definition Continued

- ❖ Moisturizers are cosmetic preparations used for protecting and lubricating the skin. These functions are normally performed by sebum produced by healthy skin. Moisturizers are available as lotions, creams, ointments, bath oils, or soap substitutes.

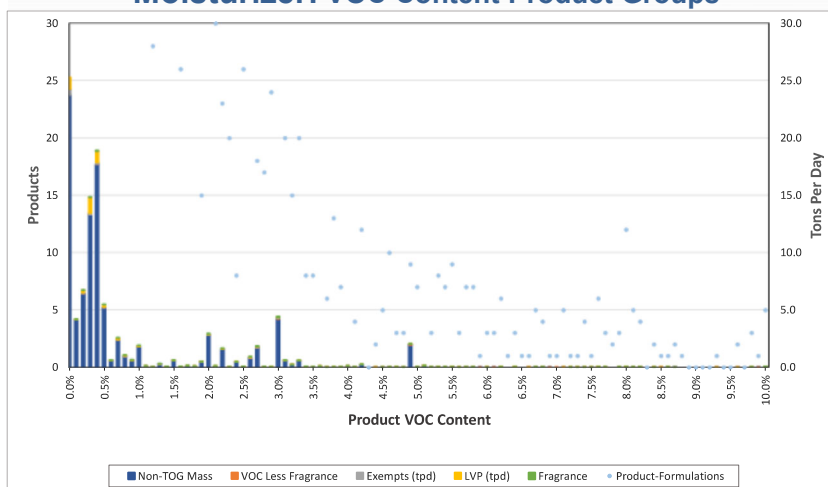
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Hand and Body Conditioner, Cream, Lotion, and Moisturizer: Category Overview

Reporting Companies	419
Reported Products	16,736
Sales Weighted Avg. VOC Content	0.85%
VOC (tpd)	0.86
PWMIR	0.17
TOG MIR	2.53

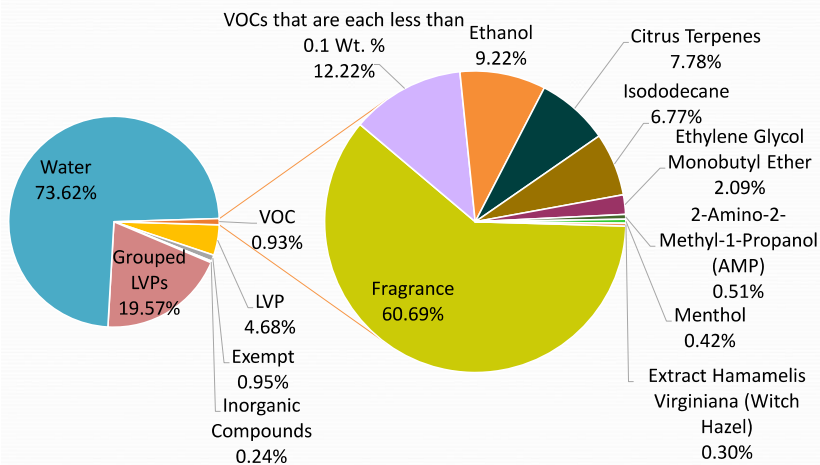
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Hand and Body Conditioner, Cream, Lotion, and Moisturizer: VOC Content Product Groups



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Hand and Body Conditioner, Cream, Lotion, and Moisturizer: VOC Breakdown



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Hand and Body Conditioner, Cream, Lotion, and Moisturizer: Possible VOC Thresholds

Possible VOC Limit	0.25%	0.50%	0.75%	1.00%	1.25%	1.50%	1.75%	2.00%
VOC Tons Per Day Reduced	0.77	0.68	0.59	0.51	0.46	0.42	0.38	0.33
Complying Market Share (Product Formulations)	21%	21%	21%	70%	70%	70%	70%	82%
Complying Market Share (Mass)	25%	25%	25%	81%	81%	81%	81%	86%

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Discussion & Questions

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Mouthwash/Rinse

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Mouthwash/Rinse

Cosmetic:

Cosmetic mouthwash is a rinse that may temporarily control or reduce bad breath and leave behind a pleasant taste. They do not reduce the risk of cavities or gum disease.

Therapeutic:

Therapeutic mouthwash is a rinse with active ingredients that kill bacteria and help reduce plaque, gingivitis, cavities and bad breath. Those that contain fluoride help prevent or reduce tooth decay.

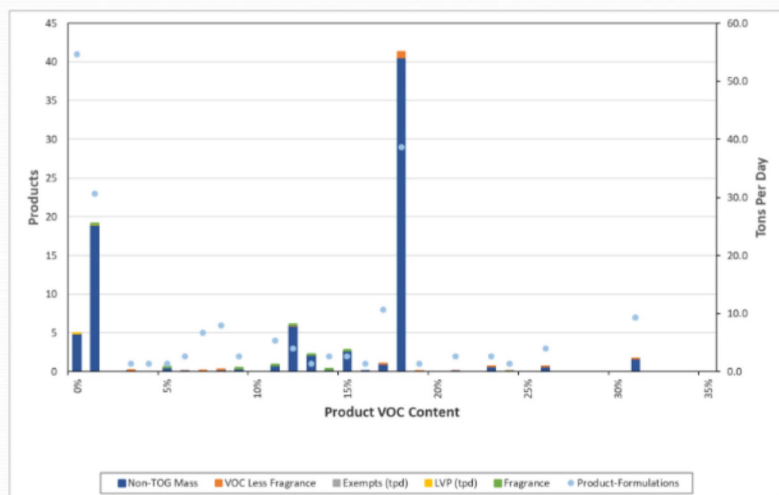
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Mouthwash/Rinse Category Overview

Number of Companies	• 42
Number of Products	• 518
Sales (tpd)	• 111
VOC Mass (tpd)	• 1.39
SWA VOC	• 11.92%
TOG MIR	• 1.98 gO ₃ /gTOG

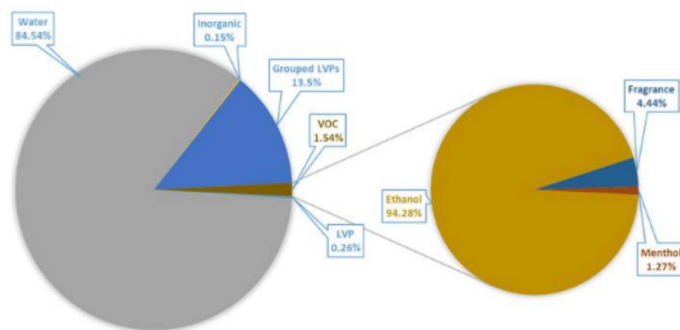
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Mouthwash/Rinse VOC Content Histogram



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Mouthwash/Rinse VOC Breakdown



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Mouthwash/Rinse Possible VOC Thresholds

Possible VOC Limit	1%	5%	10%
VOC Tons Per Day Reduced	1.28	0.96	0.57
Complying Market Share (Product-Formulations)	43%	45%	55%
Complying Market Share (Mass)	29%	30%	31%

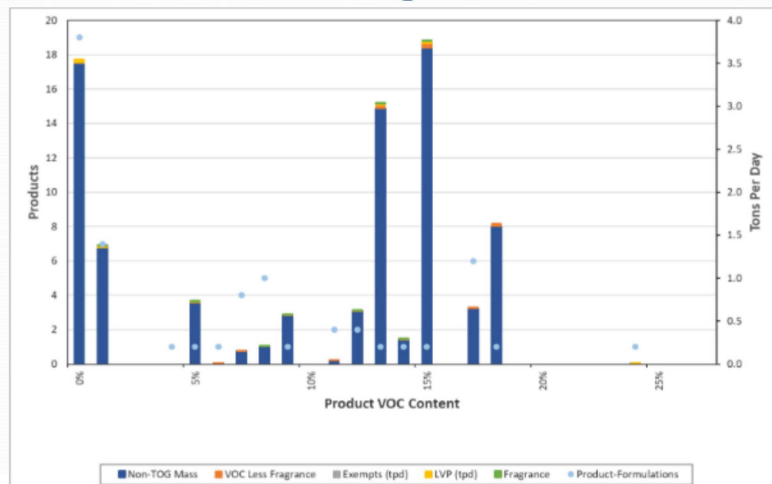
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Cosmetic Mouthwash Overview

Number of Companies	• 35
Number of Products	• 157
Sales (tpd)	• 16.7 tpd
VOC Mass (tpd)	• 0.17
SWA VOC	• 9.17%
TOG MIR	• 2.38 gO ₃ /gTOG

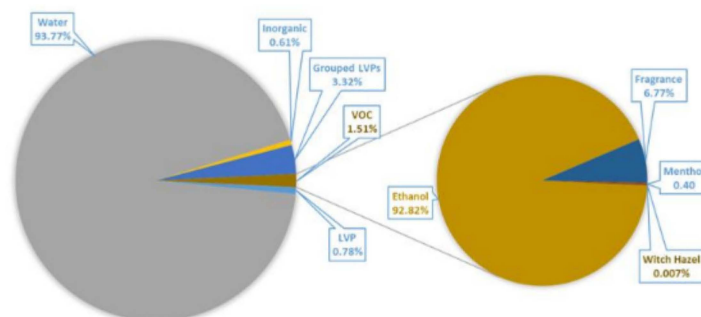
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Cosmetic Mouthwash VOC Content Histogram



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Cosmetic Mouthwash VOC Breakdown



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Cosmetic Mouthwash Possible VOC Thresholds

Possible VOC Limit	0%	1%	5%
VOC Tons Per Day Reduced	0.16	0.14	0.10
Complying Market Share (Product-Formulations)	37%	50%	52%
Complying Market Share (Mass)	21%	30%	34%

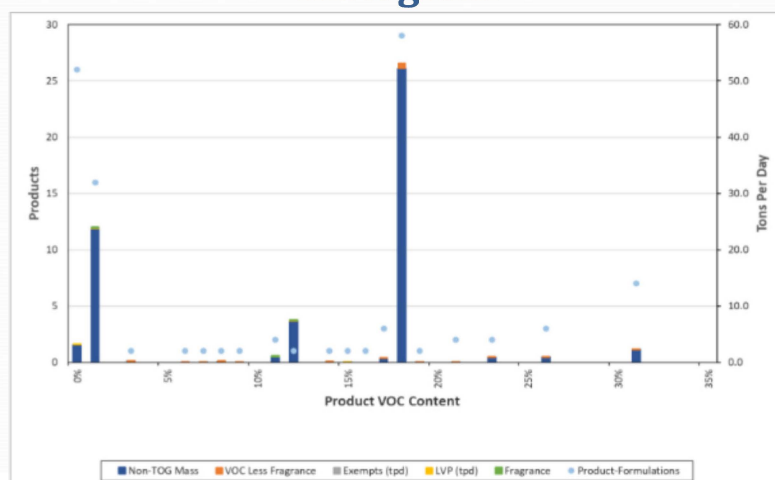
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Therapeutic Mouthwash Overview

Number of Companies	• 24
Number of Products	• 361
Sales (tpd)	• 94.3 tpd
VOC Mass (tpd)	• 1.22
SWA VOC	• 12.9%
TOG MIR	• 1.90 gO ₂ /gTOG

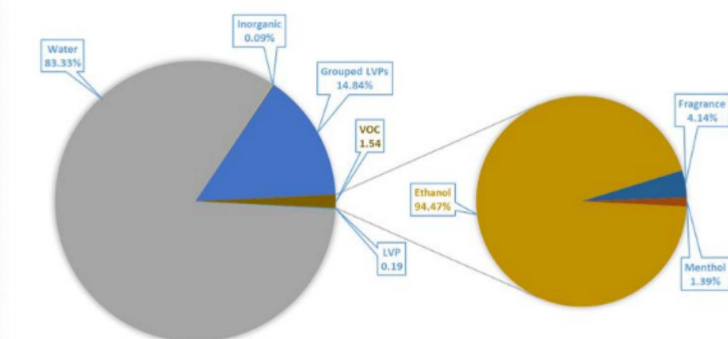
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Therapeutic Mouthwash VOC Content Histogram



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Therapeutic Mouthwash VOC Breakdown



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Therapeutic Mouthwash VOC Range Analysis

VOC Range	Number of Products	Sales (million)	Sales (tpd)	VOC Mass (tpd)
0% - 0.5%	86	15	26.7	0.022
10% - 13.5%	13	3.4	8.5	0.12
17% - 18.5%	150	25.9	52.3	0.92
Totals:	249	44.3	87.5	1.06

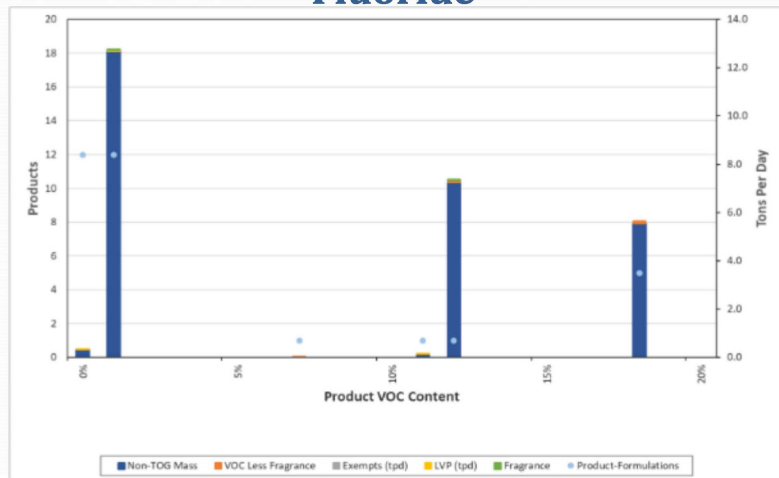
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Therapeutic Mouthwash Product Comparison

	Product 1	Product 2	Product 3
VOC %	0%	11%	18%
Claims	Antigingivitis, Antiplaque	Antigingivitis, Antiplaque	Antigingivitis, Antiplaque
Fluoride	No	No	No
Alcohol	No	Yes	Yes
Rinse Duration	30 Seconds	30 Seconds	30 Seconds
Restrictions	Children under 6 years of age Do not use	Children under 6 years of age Do not use	Children under 12 years of age Do not use

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Therapeutic Mouthwash Products with Fluoride



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Therapeutic Mouthwash Possible VOC Thresholds

Possible VOC Limit	1%	5%	10%
VOC Tons Per Day Reduced	1.11	0.84	0.51
Complying Market Share (Product-Formulations)	41%	42%	46%
Complying Market Share (Mass)	29%	29%	29%

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Summary for Mouthwash Products

- Potential for VOC reductions
- FDA Regulated
- A split is not necessary for regulatory purposes
- Further discussion with industry stakeholders

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Discussion & Questions

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What's Next?

- Spring-Summer 2019: Topic-specific Workgroups
- Fall 2019: Public workshop to identify and quantify emissions benefits of regulatory options
- Late 2019/Early 2020: Additional public workshop(s) as needed
- Ongoing: Meet with interested stakeholders
- Late 2020: Proposed regulatory amendments for Board consideration

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<https://public.govdelivery.com/accounts/CARB/subscriber/new>
Enter your email and check "Consumer Products Program"

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