



Webinar on Summary of Findings on DTSC's Information Call-in on Nail Products

May 3, 2023

Call In: +1 (669) 900-6833
Webinar ID: 832 9057 0273

The meeting will begin shortly.
Today's meeting is being recorded.



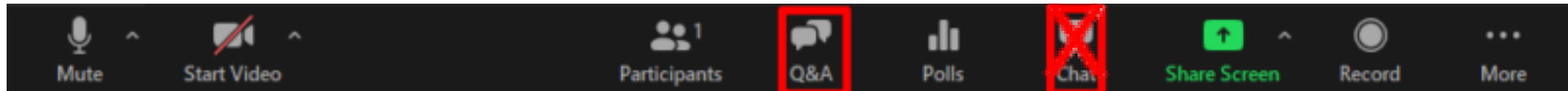
Department of Toxic Substances Control



CalEPA

Webinar Instructions

- You are in a listen and view only role
- If you have a question or comment



- Use Q&A feature (bottom of the screen)
- Chat function is disabled
- Email: SaferConsumerProducts@dtsc.ca.gov
- We will respond during Q&A session



Agenda

- Opening Remarks
- Summary of Findings on DTSC's Information Call-in on Nail Products
- Questions and Answers
- Closing Remarks





Summary of Findings on DTSC's Information Call-in on Nail Products

Dicle Yardimci, Ph.D.

Senior Hazardous Substances Engineer

May 3, 2023



Department of Toxic Substances Control



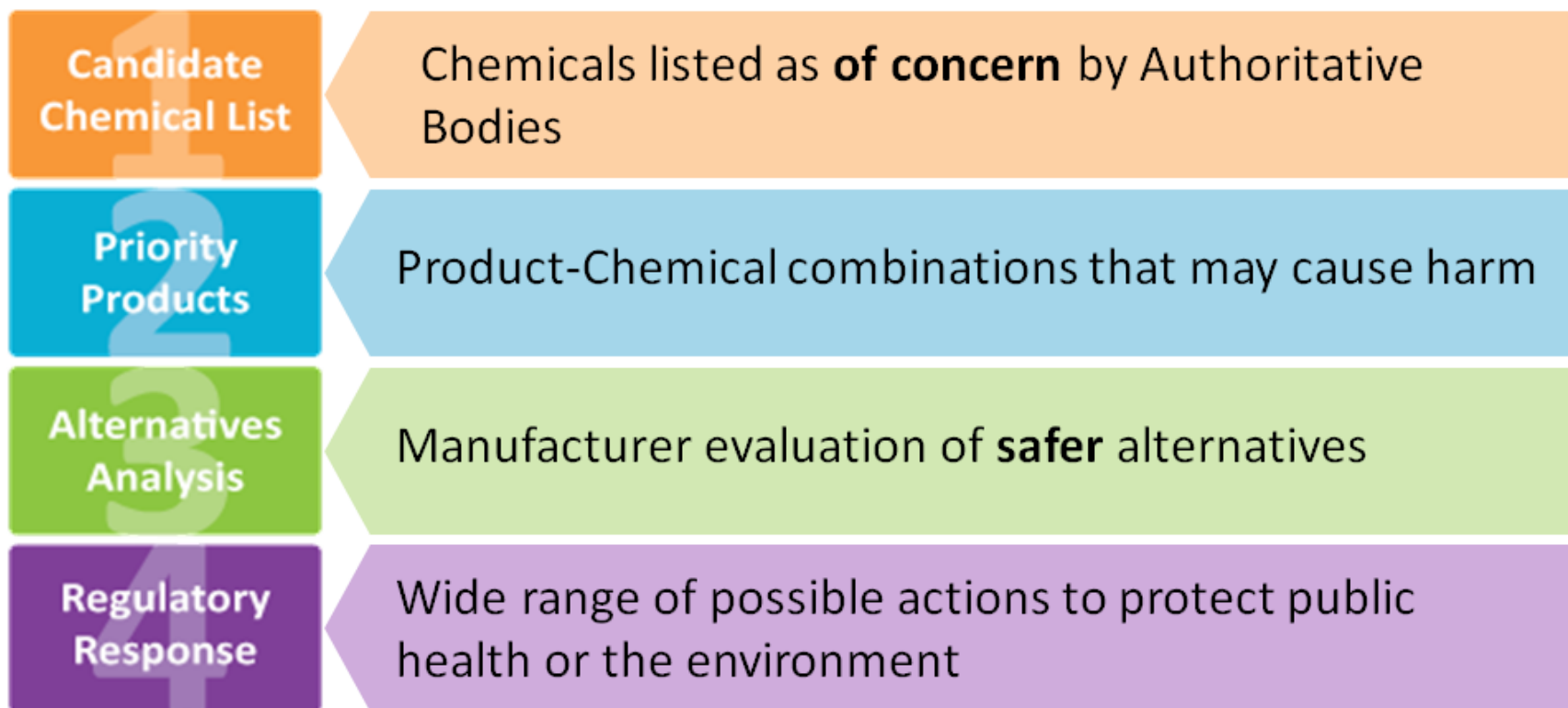
CalEPA

Agenda

- SCP Regulatory Framework
- DTSC's Nail Product Efforts
- DTSC's Information Call-in Request
- Summary of Findings on Information Call-in
- Questions and Answers



Safer Consumer Products (SCP) Regulatory Framework



SCP website: <https://dtsc.ca.gov/scp/>



Background

- Annual nail product sales exceed \$1 billion in U.S.
- Nail salon workers are exposed to potentially harmful chemicals
 - Poor ventilation in salons
 - Often work more than 8 hours/day and 40 hours/week
 - Often immigrants with low socioeconomic status
 - Often women of childbearing age



DTSC's Nail Product Efforts

- Tested nail products
 - 2012 [DTSC tested limited number of nail products](#)
 - 2020 – 2021 Analytical laboratory study
- Evaluated chemicals in nail products (2016 – 2021)
- Proposed Priority Products
 - 2019 – 2023 [Nail products containing toluene proposed and adopted as a Priority Product](#)
 - 2020 [Nail products containing methyl methacrylate proposed as a Priority Product](#)
 - Nail products containing triphenyl phosphate



DTSC's Nail Product Efforts (Continued)

- Published [Healthy Nail Salon Recognition Program Guidelines](#) (2018)
- Held public workshops
 - 2017 [Public workshop on chemicals in nail products](#)
 - 2022 [Public workshop on DTSC's evaluation of chemicals in nail products](#)
- Conducted [information call-in](#) request (2020 – 2021)



Necessity of Requesting Information

- Data gaps
- Information not readily available
- Lack of transparency on full ingredient list of nail products



Information Call-in

California Code of Regulations, title 22, section 69501.4(b) authorizes DTSC to **request information** that it determines necessary to implement the regulations **from product or chemical manufacturers, importers, assemblers, or retailers via an information call-in**



Response Status List (RSL)

- [Response Status List \(RSL\)](#) is a list of responsible information call-in stakeholders
- RSL includes company name and its response status
- There are three possible response statuses for RSL
 - Response with information provided
 - Response with information unavailable
 - No response

California Code of Regulations, Title 22, section 69501.4(c)



Information Call-in Preparation



Trade Secret
Confidential Business
Information (CBI)



Scope



Stakeholder List



Stakeholder Questions



CaSAFER Site



CaSAFER User Guide



Stakeholder
Notification Letter



DTSC's Information Call-in on Nail Products

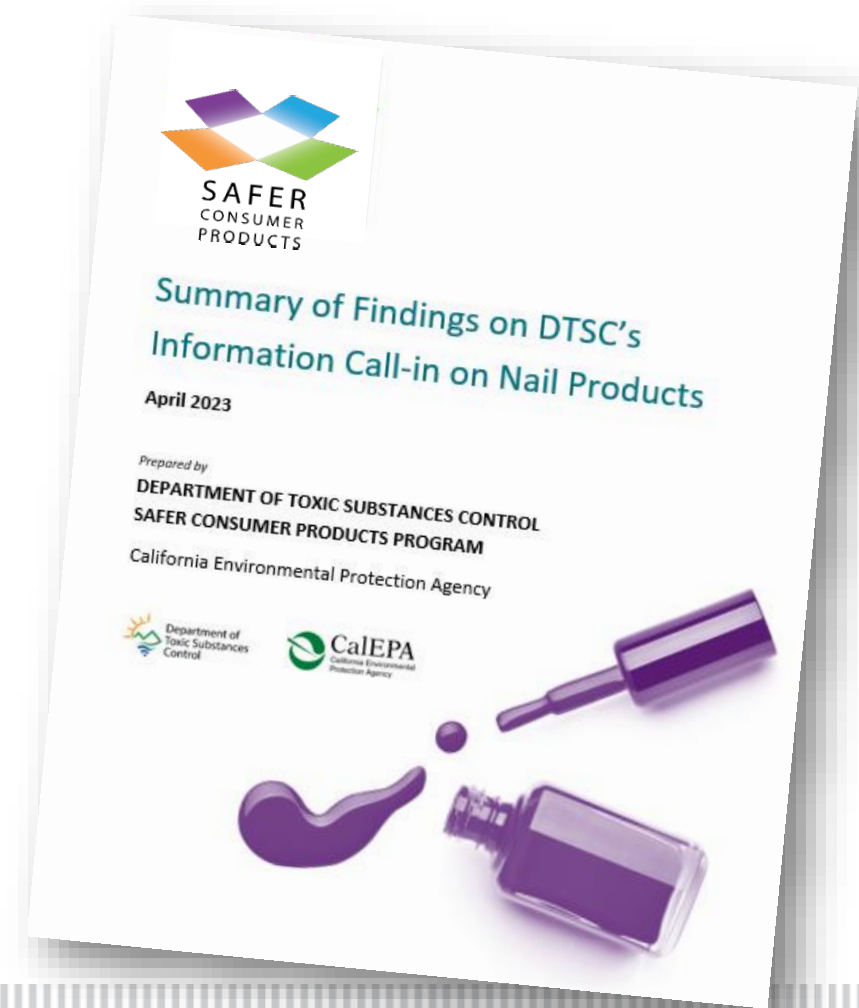
- Initiated on September 18, 2020 and closed on May 30, 2021
- Information call-in goals
 - Fill in data gaps
 - Reduce research time
 - Identify potential Priority Products
 - Identify and analyze potential alternatives

[DTSC's Information Call-in on Nail Products](#)



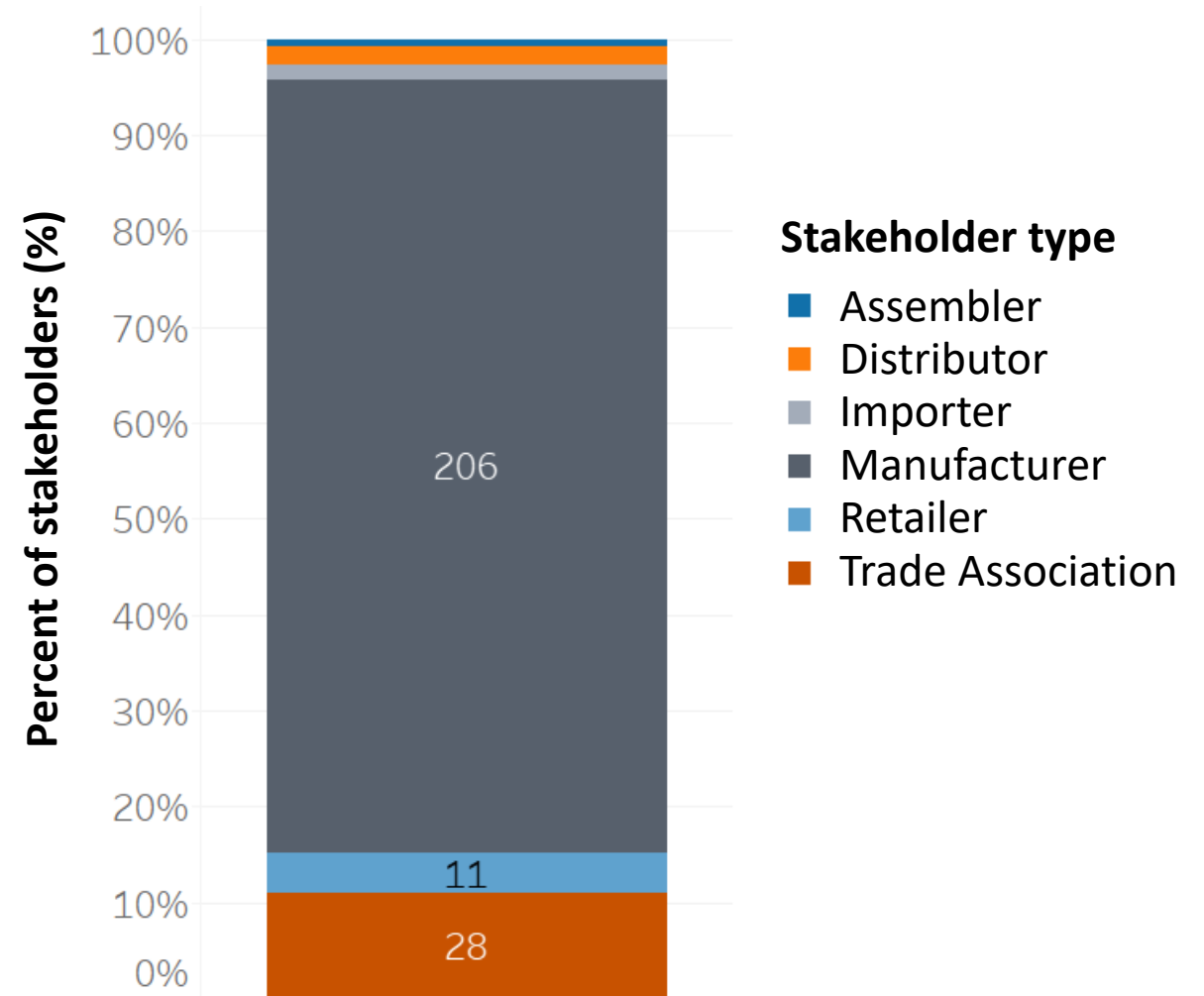
Summary of Findings on DTSC's Information Call-in on Nail Products Report

Nail Products Information Call-in Report



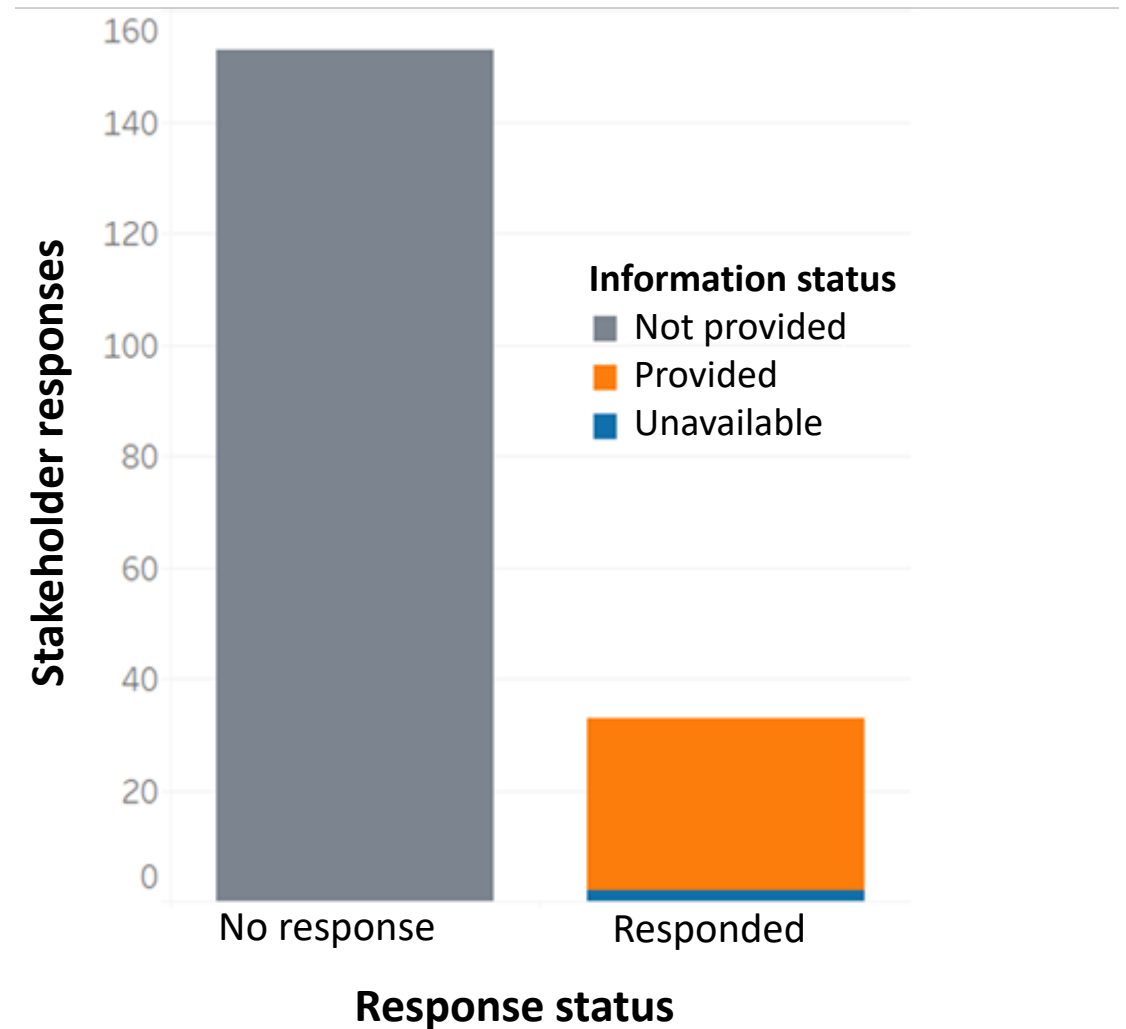
Stakeholder Distribution

- Contacted 256 nail product stakeholders
- 28 trade associations are excluded from RSL
- 42 additional stakeholders are excluded from RSL
- 186 stakeholders are published on RSL



Response Rate

- 186 stakeholders are published on RSL
- 33 (17.7%) stakeholders responded
- 31 stakeholders provided information
- 153 (82.3%) stakeholders did **not** respond



[Response Status List \(RSL\) for Information Call-in on Nail Products](#)



Questions to Stakeholders

■ Nail product formulations

- Intentionally added ingredients
- Residuals and contaminants
- Concentration ranges
- Functional use information

■ Nail products marketed with “green” or “safer” claims

- Safer for children and pregnant women
- Distinction from products without such claims
- Safer alternatives



Nail Product Categories

- Liquid-powder system artificial nail products
- UV gel nail products
- Solvent-based nail coatings
- Other nail products
(products not included in categories listed above)



Concentration Range Guidance

Concentration range
More than 0% but less than 0.1%
Equal to or more than 0.1% but less than 0.5%
Equal to or more than 0.5% but less than 1%
Equal to or more than 1% but less than 5%
Equal to or more than 5% but less than 10%
Equal to or more than 10% but less than 25%
Equal to or more than 25% but less than 50%
Equal to or more than 50% but less than 75%
Equal to or more than 75% up to 100%



Caveats of Information Call-in Data

- Due to 17.7% response rate, data set may ***not*** represent the entire nail product market in California
- Data formatting and cleaning
 - Non-uniform reporting, missing data, or duplicate entries
- Chemicals reported with multiple concentration ranges
 - DTSC used the upper concentration range



Focus of Information Call-in Report

- Reported information in an aggregated form
- Reported chemicals that are on [DTSC's Candidate Chemical \(CC\) List](#)
 - 97 (11%) of reported chemicals with CAS RNs were identified as Candidate Chemicals (CCs)
- Chemicals that are **not** on the CC List are outside the scope
- Chemicals that are reported as part of a chemical class are outside the scope



Reported Candidate Chemicals (CCs)

97 CCs reported with CAS RNs:

- 22 CCs previously evaluated by DTSC
- 75 CCs previously unknown
 - 44 CCs are on hazard trait-based authoritative lists with human health hazard traits
 - 31 CCs are on exposure-based authoritative lists with potential exposure concern or have environmental hazard traits but do not have human health hazard traits



Candidate Chemicals (CCs) with Human Health Hazard Traits

- 2-(4-tert-Butylbenzyl)propionaldehyde
- 2-Butoxyethanol
- Acetaldehyde
- **Acetone**
- **Acrylic acid**
- Alpha-methyl styrene
- **Aluminum**
- Arsenic
- Benzene
- Benzene-1,2:4,5-tetracarboxylic dianhydride
- Benzo[a]pyrene
- **Benzophenone**
- **Benzophenone-3**
- Benzyl violet 4B
- **Butylated hydroxyanisole (BHA)**
- Butylbenzyl phthalate (BBP)
- Butylparaben
- Cadmium
- **Carbon black**
- Chromium
- Cobalt
- Coconut oil diethanolamine condensate
- Copper
- Cumene
- Dibenzo[a,h]anthracene
- **Dibutyl phthalate (DBP)**
- Dibutyltin dilaurate
- Diisobutyl phthalate (DIBP)
- Distillates (petroleum), hydrotreated middle
- **Ethyl acetate**
- **Formaldehyde**
- Ginkgo biloba extract



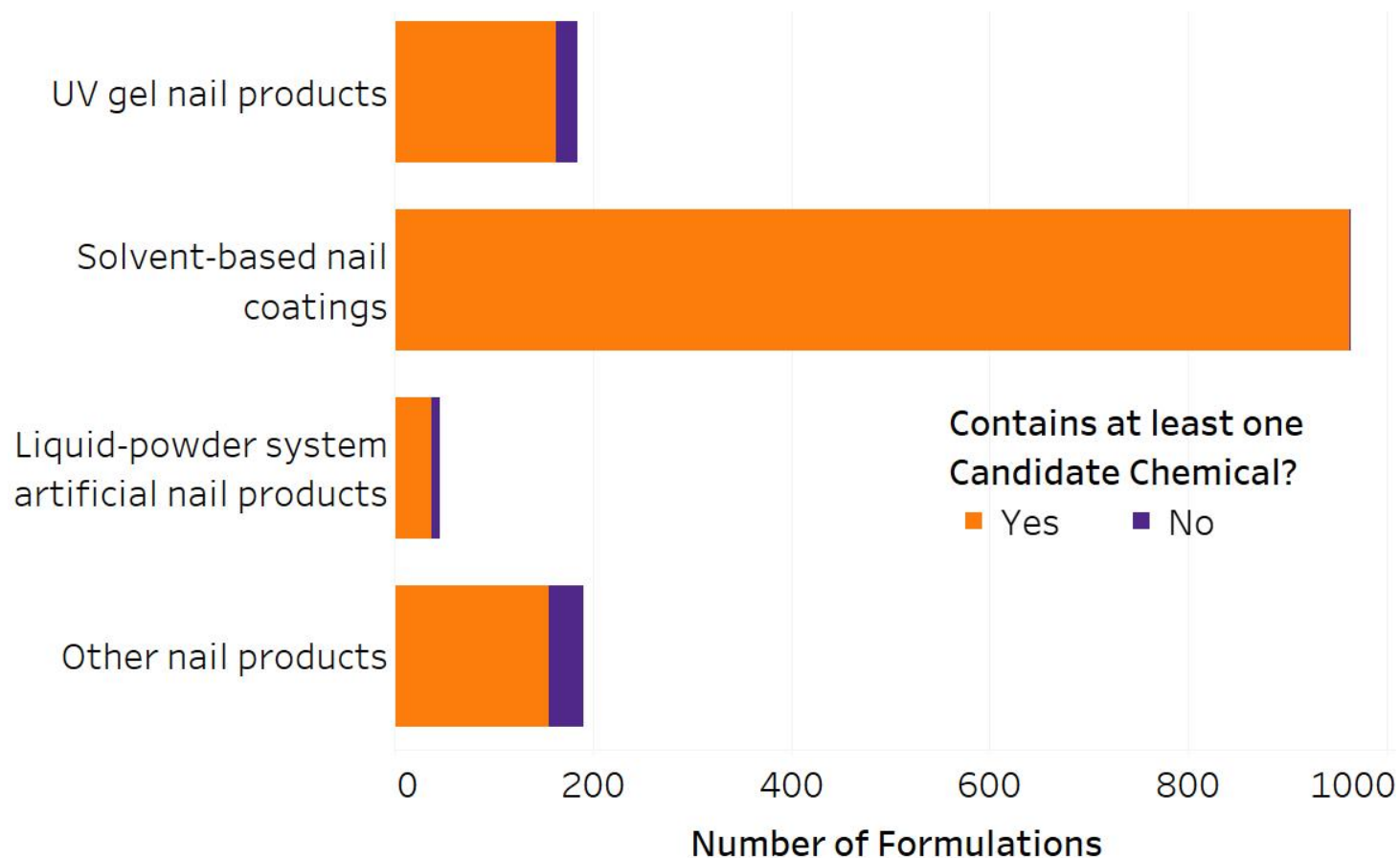
Candidate Chemicals (CCs) with Human Health Hazard Traits (continued)

- **Isobutane**
- **Isopropyl alcohol (isopropanol or IPA)**
- Lead
- Mercury
- Methanol
- **Methyl ethyl ketone (MEK)**
- Methyl isobutyl ketone
- **Methyl methacrylate (MMA)**
- **N,N-dimethyl-p-toluidine (DMPT)**
- Naphtha (petroleum), light alkylate
- **n-Butane**
- n-Butanol
- n-Hexane
- Nickel
- Nickel carbonyl
- Petrolatum
- Petrolatum (petroleum), alumina-treated
- Phenol
- **Phosphoric acid**
- Propionaldehyde
- Propylene oxide
- Propyleneglycol monomethyl ether
- Selenium
- **Silica**
- Sodium hydroxide
- Sodium N-(hydroxymethyl)glycinate
- Styrene
- **Tert-butyl alcohol (TBA)**
- **Titanium dioxide**
- **Toluene**
- Trimethylolpropane triacrylate
- **Triphenyl phosphate (TPhP)**
- Vanadium
- Xylenes



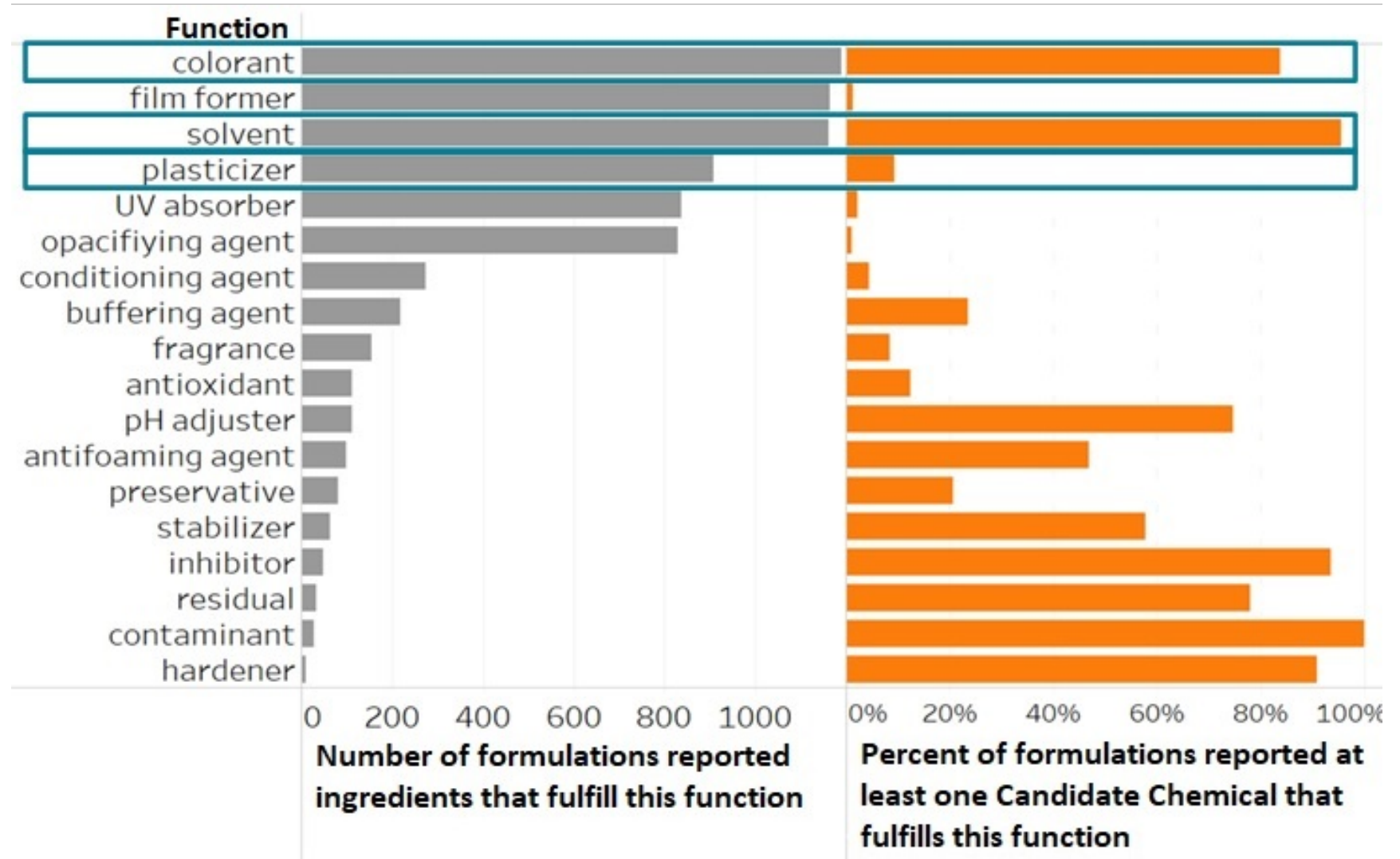
Reported Formulations by Product Category

- 1,384 formulations reported
- 95% of reported formulations contained *at least one CC*



Prevalently Reported Functions of Chemicals

- **Colorants**
- Film formers
- **Solvents**
- **Plasticizers**
- UV absorbers
- Opacifying agents



Solvents

- 95.7% of solvent-containing formulations reported at least one CC as a solvent
- 18 CCs reported as solvents
- Some formulations reported more than one CC as a solvent
- Some formulations reported chemicals that are ***not*** on the CC List as solvents



Prevalently Reported CCs as Solvents

Candidate Chemical name	CAS RN	Concentration range
Ethyl acetate	141-78-6	More than zero up to 100%
Isopropanol (IPA)	67-63-0	More than zero up to 100%



Colorants

- 83.9% of colorant-containing formulations reported at least one CC as a colorant
- 16 CCs reported as colorants
- Some formulations reported more than one CC as a colorant



Prevalently Reported CCs as Colorants

Candidate Chemical name	CAS RN	Concentration range
Titanium dioxide	13463-67-7	More than zero up to 50%
Carbon black	1333-86-4	More than zero up to 50%
Aluminum	7429-90-5	More than zero up to 50%



Plasticizers

- 9.3% of plasticizer-containing formulations reported at least one CC as a plasticizer
- 4 CCs reported as plasticizers
- Some formulations reported more than one CC as a plasticizer
- Some formulations reported chemicals that are ***not*** on the CC List as plasticizers



Prevalently Reported CCs as Plasticizers

Candidate Chemical name	CAS RN	Concentration range
Triphenyl phosphate (TPhP) (prevalently reported)	115-86-6	More than zero up to 10%
Diethyl hexyl adipate	103-23-1	More than 0.5% up to 5%
n-Butanol	71-36-3	More than 0.5% up to 1%
Tricresyl phosphate	1330-78-5	More than 1% up to 5%



Contaminants and Residuals

- 5 of 31 stakeholders reported contaminants or residuals
- Stakeholders did ***not*** report the distinctions between contaminant CCs versus residual CCs
- 49 CCs reported as contaminants or residuals



Prevalently Reported CCs as Contaminants or Residuals

Candidate Chemical name	CAS RN	Concentration range
Dibutyl phthalate (DBP)	84-74-2	More than zero up to 0.1%
Formaldehyde	50-00-0	More than zero up to 0.1%
Toluene	108-88-3	More than zero up to 0.1%
Xylenes	1330-20-7	More than zero up to 0.1%



Nail Products Marketed as “Green” or “Safer”

- 5 of 31 stakeholders responded to questions on nail products marketed as “green” or “safer”
- Products with “green” or “safer” claims were similar to products without such claims
- Some nail products marketed with “green” or “safer” claims may contain CCs
- There may be no basis to describe products as “safer” based on marketing claims



Summary of Key Findings

- 95% of reported formulations contained at least one Candidate Chemical (CC)
- 97 (11%) of reported chemicals with CAS RNs were identified as CCs
 - 22 CCs previously evaluated by DTSC
 - 75 CCs previously unknown
- Solvents, colorants, and plasticizers were prevalent functions with highest percentage of instances where the function was fulfilled by a CC



Summary of Key Findings (Continued)

- Some functions fulfilled without use of CCs and there may be safer alternatives to CCs
- Some nail products marketed with “green” or “safer” claims may contain CCs
- There may be no basis to describe products as “safer” based on marketing claims



Significance of Findings

- Inform the public on potentially harmful chemicals
- New information on the use of CCs in nail products
- Identify CCs for potential future evaluation
- Informative for seeking safer alternatives



Lessons Learned

- Collaborating with trade associations
 - Identifying stakeholders
 - Defining nail products
- Addressing concerns on trade secret and CBI
 - CalSAFER information call-in module
 - Allowing stakeholders to report concentration ranges
- Limited enforcement authority (17.7% response rate)
- Non-uniform reporting
- Data cleaning



Acknowledgements

- Abigail Noble
- Tiglath Moradkhan
- Brian Chung
- Heather Lee
- Kyle Harris
- Michelle Romero-Fishback
- Armeen Etemad
- Dennis Guo
- David Grealish
- Steve Bunnell
- OEIM Staff
- SCP Management





Contact Information

- Technical questions: Dicle.Yardimci@dtsc.ca.gov
- General questions: SaferConsumerProducts@dtsc.ca.gov
- Meeting requests: Heather.Kessler@dtsc.ca.gov
- Join our E-list to get updates: bit.ly/scpupdates



Questions & Answers



- Click **Raise Hand**  in the webinar controls to ask your question directly
- Click  at the bottom of your screen to type in your question
- From the phone, press ***9** to raise your hand and ***6** to unmute
- Please say your **name** and **affiliation** prior asking a question
- Please ask only **one (1) question** at a time

