Post Meeting Announcement

Expert Panel for Cosmetic Ingredient Safety
173rd Meeting (June 9 – 10) - Findings

June 13, 2025

● Final Safety Assessment

- **Tetrabromophenol Blue – 1 ingredient – Safe as a hair dye ingredient**
- **Propylene Carbonate – 1 ingredient – Safe when formulated to be non-irritating**
- ***Paeonia suffruticosa* – 5 ingredients – Split conclusion (3 safe as used; 2 insufficient data conclusion)**

● Tentative Safety Assessments

- **4-Chloro-2-Aminophenol – 1 ingredient – Unsafe**
- **4-Nitro-*o*-Phenylenediamine - 1 ingredient – Safe as an oxidative hair dye ingredient**
- ***Lactobacillus* Ferment Ingredients – 4 ingredients – Safe as used**
- **2-Bromo-2-Nitropropane-1,3-Diol - 1 ingredient – Safe as used**
- **Cocoyl Hydrolyzed Collagens – 4 ingredients – Safe as used**

● Insufficient Data Announcements

- **2-Nitro-*p*-Phenylenediamine – 1 ingredient**
- **Pyrogallol – 1 ingredient**
- **Dimer Dilinoleates – 8 ingredients**
- **Oxyquinoline - 2 ingredients**

● 173rd Meeting Notes

- **Director's Report**
- **Re-Reviews**
  - **5 re-review summaries approved (Ascorbic Acid & Ascorbates; Isopropanolamines; Waxes; Glyceryl Monoesters - with use; and Glyceryl Monoesters - no use)**
- **Strategy Memo - Phthalates**
- **Hair Dye Epidemiology Resource Document**
- **RAWG**
  - **2026 Draft Priorities – clustering/groupings**
  - **Prostaglandins – read-across discussion**
- **Scientific Literature Reviews – available or under development**
- **Next Expert Panel Meeting – Monday and Tuesday, September 8 - 9, 2025 – *virtual***
  - ***All submissions for this meeting should be received by CIR no later than August 1, 2025***

Final Safety Assessments

Final safety assessments will be posted on the Cosmetic Ingredient Review (CIR) website at www.cir-safety.org. Unpublished data cited as references in CIR safety assessments are available for review. Any interested person who has sound scientific evidence that a final safety assessment is incorrect may petition the Expert Panel for Cosmetic Ingredient Safety (Panel) to amend the safety assessment.

Tetrabromophenol Blue

The Panel issued a Final Report with the conclusion that Tetrabromophenol Blue is safe for use as a hair dye ingredient in the present practices of use and concentration described in the safety assessment.

Tetrabromophenol Blue is reported to function as an oxidative and direct hair dye in hair coloring products. The Panel recognizes that hair dyes containing this ingredient, as coal tar hair dye products, are exempt from certain adulteration and color additive provisions of the Federal FD&C Act when the label bears a caution statement and patch test instructions for determining whether the product causes skin irritation. The Panel expects that following this procedure will identify prospective individuals who would have an irritation/sensitization reaction and allow them to avoid significant exposures.

Propylene Carbonate

The Panel reviewed the available data and issued a Final Amended Report with the conclusion that Propylene Carbonate is safe in cosmetics in the present practices of use and concentration described in the safety assessment, when formulated to be non-irritating. According to 2023 FDA VCRP data, Propylene Carbonate is reported to be used in 882 total formulations. RLD data collected in 2024 indicate that Propylene Carbonate is used in 13,340 total formulations. This ingredient is used at up to 17.9% in leave-on products (according to a 2022 concentration of use survey conducted by Personal Care Products Council (Council)).

Paeonia suffruticosa-derived ingredients

The Panel reviewed the available data and issued a Final Report concluding that Paeonia Suffruticosa Seed Oil, Paeonia Suffruticosa Root Extract, and Paeonia Suffruticosa (Tree Peony) Root Bark Extract are safe in cosmetics in the present practices of use and concentration described in the safety assessment. The Panel also concluded that the available data are insufficient to make a determination of safety for Paeonia Suffruticosa Bark Extract and Paeonia Suffruticosa Extract. Considering newly received information, the Panel determined that the ingredients named Paeonia Suffruticosa (Tree Peony) Root Bark Extract and Paeonia Suffruticosa Root Bark Extract are equivalent. Additionally, this information supported the common reference of these ingredients to "root bark cortex" or "moutan cortex."

Tentative Safety Assessments

For the tentative safety assessments listed below, to be posted on the CIR website in the near future, interested persons are given 60 days from the posting date to comment, provide information, and/or request an oral hearing before the Panel. Information may be submitted without identifying the source or the trade name of the cosmetic product containing the ingredient. All unpublished data submitted to CIR will be discussed in open meetings and are available for review by any interested party. Please submit data and/or comments to CIR ***as soon as possible, but no later than 60 days from the actual posting date of the report, for full consideration. Submissions received thereafter may be in jeopardy of not being considered by the Panel at the next review.*** *The updated reports may be scheduled for review by the Panel as early as at the* ***September 8 - 9, 2025 meeting.***

4-Chloro-2-Aminophenol

The Panel issued a revised Tentative Amended Report for public comment with the conclusion that 4-Chloro-2-Aminophenol is unsafe for use as a hair dye ingredient. The Panel determined that, while the absorption data is lacking, it is likely that this aromatic amine will absorb to some extent. Positive genotoxicity results were observed, specifically in Ames tests, and bladder tumors were observed in an oral carcinogenicity study in rats.

4-Nitro-*o*-Phenylenediamine

The Panel issued a Tentative Amended Report for public comment with the conclusion that 4-Nitro-*o*-Phenylenediamine is safe for use as an oxidative hair dye ingredient in the present practices of use and concentration described in the safety assessment.

4-Nitro-*o*-Phenylendiamine is reported to function as an oxidative hair dye in hair coloring products. The Panel recognizes that hair dyes containing this ingredient, as coal tar hair dye products, are exempt from certain adulteration and color additive provisions of the Federal FD&C Act when the label bears a caution statement and patch test instructions for determining whether the product causes skin irritation. The Panel expects that following this procedure will identify prospective individuals who would have an irritation/sensitization reaction and allow them to avoid significant exposures.

Lactobacillus Ferment Ingredients

The Panel reviewed the report on Lactobacillus Ferment, Lactobacillus Ferment Lysate, Lactobacillus Ferment Lysate Filtrate, and Lactobacillus Ferment Filtrate, and issued a Tentative Report for public comment with the conclusion that these ingredients are safe in cosmetics in the present practices of use and concentration described in the safety assessment. The Panel noted that these ingredients may have a skin lightening effect; however, the Panel noted that skin lightening is considered a drug effect and should not occur during the use of cosmetic products. In addition, concern for this effect was further mitigated due to the Panel's knowledge of the mechanism of action (i.e., inhibition of tyrosinase activity) and their clinical experience. However, formulators should only use these ingredients in products in a manner that does not cause depigmentation.

According to 2023 VCRP and 2024 RLD data, Lactobacillus Ferment is reported to have the highest number of uses among the four ingredients reviewed in this report (it is used in 266 and 2106 formulations, respectively). Results of a 2025 concentration of use survey conducted by Council indicate that Lactobacillus Ferment also has the highest concentration of use in leave-on formulations; it is reported to be used at up to 5.6% in face and neck products and in "other" skin care products.

2-Bromo-2-Nitropropane-1,3-Diol

The Panel reviewed the available data and issued a Tentative Amended Report concluding that 2-Bromo-2-Nitropropane-1,3-Diol is safe in cosmetics in the present practices of use and concentration described in the safety assessment. The Panel noted that this ingredient may both act as a formaldehyde-releaser and participate in the formation of *N*-nitrosamines. Based on the low maximum concentration of use of 2-Bromo-2-Nitropropane-1,3-Diol in cosmetics, along with the low amount of formaldehyde that could be potentially be released from this ingredient, concerns about this ingredient as a formaldehyde releaser were mitigated; specifically, the Panel determined that the potential amount of formaldehyde resulting from the cosmetic use of this ingredient would be below the level they considered safe in their previous safety assessment of formaldehyde as a cosmetic ingredient. The Panel cautions that this ingredient should not be used in cosmetic products in which *N*-nitroso compounds can be formed.

RLD submitted in 2024 showed that 2-Bromo-2-Nitropropane-1,3-Diol is used in 167 cosmetic formulations. The highest use category was hair preparations (non-coloring; 64 total uses). According to the results of Council surveys that were submitted, the maximum reported concentration of use is 0.05% (as reported in 2023 for leave-on skin cleansing hand wipes and eye makeup removers, and as reported in 2025 for disposable wipes); in 2003, the maximum reported concentration of use was 0.1%.

Cocoyl Hydrolyzed Collagens

The Panel reviewed the available data and issued a Tentative Amended Report concluding that Potassium Cocoyl Hydrolyzed Collagen, TEA-Cocoyl Hydrolyzed Collagen, Cocoyl Hydrolyzed Collagen, and Sodium Cocoyl Hydrolyzed Collagen are safe in cosmetics in the present practices of use and concentration described in the safety assessment. Insufficiencies noted in a prior Insufficient Data Announcement (IDA) were considered met by responsive data submissions. The Panel noted that current concentration of use data were not reported for Cocoyl Hydrolyzed Collagen, the ingredient in this report which has the highest reported frequency of use; accordingly, receipt of maximum concentration of use data on this ingredient would help inform this safety assessment. The Panel also noted that the paucity of systemic toxicity data available for these ingredients was mitigated by the low potential for dermal absorption.

The Panel was concerned with the risks inherent in using animal-derived ingredients, namely the transmission of infectious agents and biologically-derived impurities (e.g., nucleic acids, proteins, endotoxins). The Panel stressed that these ingredients must be free of detectible pathogenic viruses, infectious agents and/or biologically-derived impurities. Additionally, the Panel cautioned that TEA-Cocoyl Hydrolyzed Collagen should not be used in cosmetic products in which *N*-nitroso compounds can be formed.

Insufficient Data Announcements

For these IDAs, interested persons are given an opportunity to comment, provide information, and/or request an oral hearing before the Panel. Information may be submitted without identifying the source or the trade name of the cosmetic product containing the ingredient. All unpublished data submitted to CIR will be discussed in open meetings and are available for review by any interested party. Please submit data and/or comments to CIR ***as soon as possible, but no later than August 1, 2025, for full consideration****.* ***Submissions received thereafter might not be considered by the Panel at their next meeting.*** *These reports may be scheduled for review by the Panel as soon as the* ***September 8 - 9, 2025 meeting****.*

2-Nitro-*p*-Phenylenediamine

The Panel issued an IDA for 2-Nitro-*p*-Phenylenediamine. The following information is required to determine the safety of this ingredient:

- Maximum concentration of use in hair dye formulations
- A 90-d oral repeated dose study with a no-observable-adverse-effect level (NOAEL) that shows a dose-response relationship
- Phototoxicity/photosensitization data

Pyrogallol

The Panel issued a second IDA for Pyrogallol. The additional data needed to determine safety for this ingredient are:

- Maximum concentration of use
- Genotoxicity studies, with metabolic activation, that test for damage to DNA adducts
- Dermal irritation and sensitization data at maximum concentration of use for non-hair dye uses
- Clarification on the type of use around the eyes
- Ocular irritation data at maximum concentration of use for products used around the eyes

Dimer Dilinoleates

The Panel issued an IDA for the following 7 dimer dilinoleate ingredients:

Bis-Behenyl/Isostearyl/Phytosteryl Dimer Dilinoleyl Dimer Dilinoleate
Bis-Behenyl/Phytosteryl Dimer Dilinoleate
Dimer Dilinoleyl Dimer Dilinoleate
Octyldodecyl/PPG-3 Myristyl Ether Dimer Dilinoleate
Phytosteryl/Isostearyl/Cetyl/Stearyl/Behenyl Dimer Dilinoleate
Phytosteryl Isostearyl Dimer Dilinoleate
Stearyl/PPG-3 Myristyl Ether Dimer Dilinoleate

The additional data needed to determine safety for these ingredients are:

- Structures for all ingredients
- Method of manufacturing for all ingredients
- Impurities/composition data for all ingredients
- Repeated oral-dose toxicity data for Dimer Dilinoleyl Dimer Dilinoleate at maximum concentrations of use
- Developmental and reproductive toxicity (DART) data
- Ocular irritation data
- Dermal irritation and sensitization data at maximum concentration of use for Octyldodecyl/PPG-3 Myristyl Ether Dimer Dilinoleate and Stearyl/PPG-3 Myristyl Ether Dimer Dilinoleate

Oxyquinoline and Oxyquinoline Sulfate

The Panel reviewed the Draft Amended Report on Oxyquinoline and Oxyquinoline Sulfate and issued an IDA. The data needs include the following:

- Impurities data on Oxyquinoline
- Phototoxicity data on Oxyquinoline
- Maximum concentration of use data on Oxyquinoline
- Dermal absorption data on Oxyquinoline
- DART data, including an NOAEL on Oxyquinoline (suitable for margin of exposure calculation)
- Clarification on the type of use around the eyes

The Panel also requested clarification regarding the basis of the decision on these ingredients, as imposed by the European Union (EU). According to the EU, Oxyquinoline and Oxyquinoline Sulfate may be used as a stabilizer for hydrogen peroxide in rinse-off hair products at a maximum concentration of 0.3% (as base). Also according to the EU, these ingredients may be used as a stabilizer for hydrogen peroxide in leave-on hair products at a maximum concentration of 0.03% (as base).

Furthermore, the Panel requested clarification on the reported use of these ingredients in eyelash and eyebrow dyes. According to 2024 RLD data, Oxyquinoline Sulfate is reported to be used in 2 eyelash and eyebrow preparation (primers, conditioners, serums, fortifiers). Given that these ingredients are used as stabilizers in hydrogen peroxide, the Panel was concerned that these 2 eyelash and eyebrow preparations were miscategorized, and may instead be eyelash and eyebrow dyes.

173rd Meeting Notes

Director's Report

Dr. Heldreth thanked the members of, and liaisons to, the Panel for their tireless efforts to protect consumers. He also thanked Dr. Don Bjerke, for whom this was the last meeting, after years of dutiful service to the Panel as the Chair of the CIR Science and Support Committee.

This meeting was the first for new CIR Staff member, Temima Nguyen, who joined CIR just a few weeks prior as a Scientific Analyst. Temima has a Bachelor of Science in Pharmaceutical Sciences from the University of Toledo and a Master of Science in Cosmetic Science from the University of Cincinnati. Prior to CIR, she worked as a cosmetic chemist (hair colors) and a regulatory specialist for food, dietary supplements, and cosmetic labeling. We greatly look forward to working with her.

Re-Reviews

In accordance with its Procedures, the Panel evaluates the conclusions of previously-issued safety assessments approximately every 15 years. At this meeting, the Panel considered 5 re-review summaries, for which they had previously chosen not to reopen the reports. The Panel reaffirmed the conclusion reached in 4 of these safety assessments, and issued a new conclusion for 1 (following an amendment to the Procedures that allows for the conclusion recategorization of a report comprising ingredients not in current use). A re-review summary for each of these safety assessments was approved by the Panel at this meeting.

1. Glyceryl Isostearates and Glyceryl Stearate/Acetate - 2 ingredients, original conclusion reaffirmed
2. Glyceryl Collagenate, Glyceryl Sesquioleate, Glyceryl/Sorbitol Oleate/Hydroxystearate, Glyceryl Stearate/Maleate, and Glyceryl Thiopropionate – 5 ingredients, conclusion transmuted to use not supported
3. Beeswax, Copernica Cerifera (Carnauba) Wax, Euphorbia Cerifera (Candelilla) Wax, and Rhus Succedanea Fruit Wax - 4 ingredients, original conclusion reaffirmed
4. Diisopropanolamine, Triisopropanolamine, Isopropanolamines, and Mixed Isopropanolamines – 4 ingredients, original conclusion reaffirmed
5. L-Ascorbic Acid, Calcium Ascorbate, Magnesium Ascorbate, Magnesium Ascorbyl Phosphate, Sodium Ascorbate, and Sodium Ascorbyl Phosphate – 6 ingredients, original conclusion reaffirmed

Strategy Memo - Phthalates

Dibutyl Phthalate was placed on the 2024 Priorities List following nomination by the FDA for cause due to restrictions imposed on uses of plasticizers in food contact applications. The Panel first published the Final Report of the Safety Assessment of Dibutyl Phthalate, Dimethyl Phthalate, and Diethyl Phthalate in 1985, and concluded that these ingredients are safe for topical application in the present practices of use and concentration in cosmetics. Upon re-review in 2002, the Panel reaffirmed the original conclusion, as published in 2005. In December 2012, the Panel deliberated on studies separately concerning endocrine disruption and diabetes, and Dibutyl Phthalate, Diethyl Phthalate, Dimethyl Phthalate, and Butyl Benzyl Phthalate; however, the Panel chose not to re-open the safety assessment of these ingredients and published their discussion as a re-review summary in 2017.

In a strategy memo, the Panel was asked,

- Does the Panel, or any other stakeholder, have a particular expert in these areas they would like to invite to give a presentation on these DART and endocrine studies?
    - The Panel responded in the affirmative and provided potential experts to invite.
- Does the Panel support the idea of having Dimethyl Phthalate in a separate re-review proposal document or would the Panel prefer that this ingredient stay in the safety assessment with Dibutyl Phthalate and Diethyl Phthalate?
    - The Panel determined to keep these ingredients together in one report.

Hair Dye Epidemiology Resource Document

The Panel reviewed the revised draft of the Hair Dye Epidemiology Resource Document and commended the improvements, including the incorporation of newly published studies and enhanced clarity. The Panel reaffirmed the importance of ongoing surveillance of emerging epidemiological data and discussed the necessity of well-designed studies with adequate statistical power to robustly evaluate potential differences by race and tumor subtype. In addition, the Panel discussed inconsistencies observed across subpopulations and noted the lack of reproducibility in follow-up studies. The Panel emphasized that, as a living resource, the document's conclusions will be periodically reassessed in light of new scientific evidence. To broaden the document's impact and increase public accessibility, the Panel recommended submitting it to a peer-reviewed journal, following appropriate formatting, editorial revisions, and individual review by each Panel member.

RAWG: 2026 Draft Priorities – clustering/groupings & Prostaglandins – read-across discussion

The Read-Across Working Group (RAWG) convened to discuss both the clustering/grouping of ingredients on the 2026 Draft Priorities and the utilization of read-across in evaluating the safety of 2 prostaglandin ingredients. The members of the RAWG reviewed the available information about the designated ingredients therein. The RAWG will prepare and submit draft recommendations for consideration by the entire Expert Panel to be considered at a future meeting.

Scientific Literature Reviews

The following Scientific Literature Reviews (SLRs)or Notices to Proceed Without the Preparation of an SLR are either posted on the CIR website or are currently under development and may be posted imminently. These may then be presented to the Panel for their review (as Draft Reports) during the next few meetings.

Cannabidiol
Centaurea cyanus flower-derived ingredients
HC Blue No. 15
Houttuynia cordata-derived ingredients
Pelargonium graveolens-derived ingredients
Polyacrylate-13
Polyacrylate Crosspolymer-6
Pyridoxine and Pyridoxine HCl
Sigesbeckia Orientalis Extract
Sodium Hydrosulfite
Salix alba (Willow)-derived ingredients

Next Expert Panel Meeting

Monday and Tuesday, September 8-9, 2025, to be held ***virtually***, via MS Teams. Please check the CIR website for details as the meeting approaches. https://www.cir-safety.org/

Expert Panel for Cosmetic Ingredient Safety
2025 Meetings Calendar

Date:	March 13th – 14th, 2025 (Thursday & Friday)
Location:	**Marriott Georgetown** 1221 22nd Street NW Washington, DC 20037
Date:	June 9th – 10th, 2025 (Monday & Tuesday)
Location:	**The Westin Georgetown** 2350 M Street NW Washington, DC 20037
Date:	September 8th –9th, 2025 (Monday & Tuesday)
Location:	Virtual
Date:	December 4th – 5th 2025 (Thursday & Friday)
Location:	Virtual