RAWG

Priorities Update

EXPERT PANEL MEETING

June 9-10, 2025

Commitment & Credibility since 1976

Memorandum

To: Expert Panel for Cosmetic Ingredient Safety Members and Liaisons
From: Bart Heldreth, PhD, Executive Director, Cosmetic Ingredient Review
Date: May 16, 2025
Subject: Draft 2026 Priorities Updates

At the March 2025 meeting, the first draft of the 2026 Priority List was presented. Therein, 15 reports were proposed, covering 43 ingredients. Since then, a proposal of a hair dye for assessment has been received from the PCPC Hair Color Technical Committee (HCTC), nominating Basic Orange 31 for inclusion on the 2026 Priorities List (taking the number of new reports proposed to 16). Reports previously prioritized and on the CIR docket at the end of 2025, as well as an extensive number of rereviews of previous assessments, will supplement the total number of reports to be assessed in 2026.

Alpha-Isomethyl Ionone is the 1st ingredient on the list with nearly 12,000 formulations reported in the RLD. While this ingredient is used as a fragrance and has a published, RIFM-completed safety assessment for that use, Alpha-Isomethyl Ionone is also reported to function as a skin conditioning agent – miscellaneous. *Accordingly, at the March meeting, the question was asked, is this safety assessment for fragrance uses also sufficient for other cosmetic uses/exposures of this ingredient?* According to the RLD, only 3,764 of the formulations reported for this ingredient are linked to fragrance preparation categories (05), including: (a) Colognes and toilet waters, (b) Perfumes, (c) Powders (dusting and talcum) (excluding aftershave talc), and (d) Other fragrance preparations. Which function, and at what concentration, this ingredient is used for in the other 8,165 products is non-obvious. *The Panel requested that a concentration of use survey be conducted for non-fragrance uses of this ingredient, to inform their answer to this question. The case is similar for the ingredient, Tetramethyl Acetyloctahydronaphthalenes, and thus the Panel awaits the survey results thereon for both of these ingredients.*

While this list includes only the lead ingredients, groupings of ingredients drafted by CIR Staff can be found on the following pages (also provided at the March meeting). The Read Across Working Group (RAWG) was asked to consider, following the conclusion of the March meeting, the Draft Priority List and determine if any changes should be made to the groupings. If the RAWG determines that changes to the groupings should be made, a proposal should be made for discussion with the full Panel. One grouping question that was raised at the March meeting was, should the 2 ingredients in this draft priorities list for review in 2026, Ethyl Trimethylbenzoyl Phenylphosphinate and Bis-Trimethylbenzoyl Phenylphosphine Oxide, be instead added to the currently advancing report on Trimethylbenzoyl Diphenylphosphine Oxide (Figure 1; which the Panel issued an IDA for at the March meeting)? The Council has initiated a survey for these 2 proposed add-ons, but we do not yet have concentration of use data thereon.

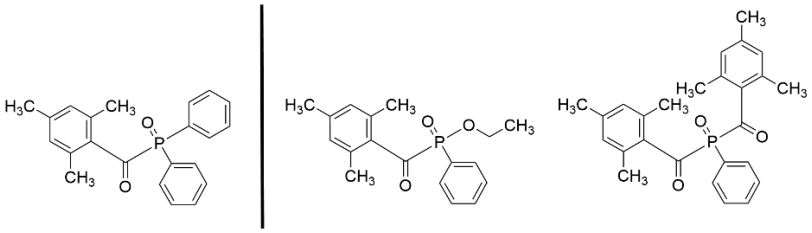


Figure 1. Trimethylbenzoyl Diphenylphosphine Oxide | Ethyl Trimethylbenzoyl Phenylphosphinate and Bis-Trimethylbenzoyl Phenylphosphine Oxide

The data requested in the IDA for the report on Trimethylbenzoyl Diphenylphosphine Oxide included: concentrations of use in non-nail products, dermal irritation and sensitization data at maximum use concentration for the skin, ocular irritation data (preferably at concentrations for products resulting in eye exposure, once received), MOE, and phototoxicity/photosensitization data. Priya has conducted a cursory search for relevant, publicly available data on these 2 proposed add-ons. No relevant published results were found in PubMed for either ingredient; however, relevant data were found in databases such as ECHA, NICNAS, and NTIS (see Tables 1 and 2, below). If the Panel determines confidence in the use of these ingredients as read-across sources to Trimethylbenzoyl Diphenylphosphine Oxide, then one or more of the above data needs might be met.

Additionally, as Toluene-2,5-Diamine Sulfate is the Allergen of the Year for 2025 from the American Contact Dermatitis Society, and it is a previously reviewed ingredient now due for rereview, the corresponding report will be docketed for Panel consideration. In the report published in 2010, the Panel concluded that Toluene-2,5-Diamine and Toluene-2,5-Diamine Sulfate are safe as hair dye ingredients in the present practices of use and concentrations but that there are insufficient data to determine the safety of Toluene-3,4-Diamine. According to the RLD, Toluene-3,4-Diamine is not currently in use in cosmetic products in the US; thus, this report is anticipated to be split into 2 rereview proposals: 1) including Toluene-2,5-Diamine and Toluene-2,5-Diamine Sulfate, for the Panel's consideration to reopen or affirm, and 2) exclusive to Toluene-3,4-Diamine, for the Panel's consideration to commute to a conclusion of use not supported. The Panel is asked if they would like to adopt this strategy.

If any of the draft priorities ingredients are removed from the list, potential replacements based on FOU of use include: Chlorella Vulgaris Extract (1182 uses in RLD), the extract of the alga, *Chlorella vulgaris*; Colophonium (aka rosin or colophane; 1179 uses in RLD), a complex combination derived from wood; Asiaticoside (1122 uses in RLD), a saponin commonly found in *Centella asiatica*; and PEG-30 Dipolyhydroxystearate (1122 uses in RLD), the polyethylene glycol diester of polyhydroxystearic acid.

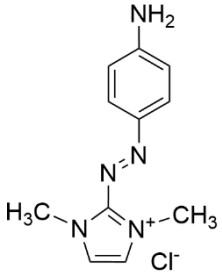
2026 Draft Priorities List

Ingredient	Frequency of Use (FOU) Data Year: 2024
For cause	
Basic Orange 31	**552**
Per FOU	
Alpha-Isomethyl Ionone	**11,929**
Hydroxycyclohexyl Phenyl Ketone	**2515**
3-*O*-Ethyl Ascorbic Acid	**1947**
Hydrolyzed Quinoa	**1786**
Ethyl Cyanoacrylate	**1659**
Ethyl Trimethylbenzoyl Phenylphosphinate	**1627**
Thioglycerin	**1549**
Tetramethyl Acetyloctahydronaphthalenes	**1505**
Ceteth-10 Phosphate	**1484**
Hydroxypropyltrimmonium Hyaluronate	**1379**
Vaccinium Myrtillus Fruit Extract	**1367**
Diethylhexyl Syringylidenemalonate	**1362**
Etocrylene	**1277**
Dimethyl Isosorbide	**1266**
Polyglyceryl-3 Methylglucose Distearate	**1227**

Proposed 2026 Report – per cause

Basic Orange 31 *– per PCPC Hair Color Technical Committee (HCTC)*

FOU = 552



Reported **Functions**: Hair Colorant and Hair Conditioning Agent

Notes: *Since FOU might not be a very accurate surrogate for exposure, with regard to hair dyes, the PCPC HCTC proposes one hair dye ingredient annually for CIR review.*

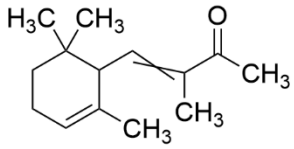
Grouping proposal: None

Proposed 2026 Reports – per FOU

Alpha-Isomethyl Ionone

FOU = 11,929

Definition: Alpha-Isomethyl Ionone is the organic compound that conforms to the structure:



Reported **Functions**: Fragrance Ingredients; Skin-Conditioning Agents - Miscellaneous

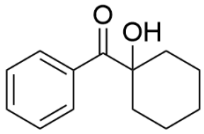
Notes: *(CAS No. 127-51-5 (alpha-)) While this ingredient is used as a fragrance and has a published, RIFM-completed safety assessment for that use, Alpha-Isomethyl Ionone is also reported to function as a skin conditioning agent – miscellaneous. Accordingly, is the safety assessment for fragrance uses also sufficient for other cosmetic uses/exposures? According to the RLD, only 3,764 of the formulations reported for this ingredient are linked to fragrance preparation categories (05), including: (a) Colognes and toilet waters, (b) Perfumes, (c) Powders (dusting and talcum) (excluding aftershave talc), and (d) Other fragrance preparations. Which function, and at what concentration, this ingredient is used for in the other 8,165 products is non-obvious.*

Grouping proposal: None

Hydroxycyclohexyl Phenyl Ketone

FOU = 2,515

Definition: Hydroxycyclohexyl Phenyl Ketone is the organic compound that conforms to the structure:



Reported **Function**: Artificial Nail Builders

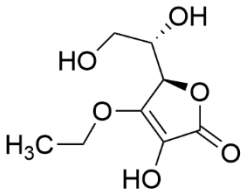
Notes: *(CAS No. 947-19-3)*

Grouping proposal: None

3-*O*-Ethyl Ascorbic Acid

FOU = 1,947

Definition: 3-*O*-Ethyl Ascorbic Acid is the organic compound that conforms to the structure:



Reported **Function**: Skin-Conditioning Agents - Miscellaneous

Notes: *(CAS No. 86404-04-8)*

CIR draft grouping: (4 ingredients proposed with a total FOU = 2,053)	***FOU***
3-O-Ethyl Ascorbic Acid	*1947*
2-O-Ethyl Ascorbic Acid	*75*
Diethyl Ascorbic Acid	*27*
3-O-Cetyl Ascorbic Acid	*4*

Hydrolyzed Quinoa

FOU = 1,786

Definition: Hydrolyzed Quinoa is the hydrolysate of the quinoa seed, *Chenopodium quinoa*, derived by acid, enzyme or other method of hydrolysis.

Reported **Function**: Skin-Conditioning Agents - Miscellaneous

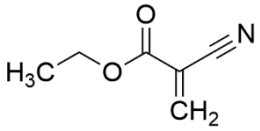
Notes: *These ingredients are each derived from Chenopodium quinoa. The Panel has previously assessed the safety of Chenopodium Quinoa Seed Oil in the Safety Assessment of Plant-Derived Fatty Acid Oils, published in IJT in 2017, concluding that those oils are safe as used.*

CIR draft grouping: (5 ingredients proposed with a total FOU = 2,875)	***FOU***
Hydrolyzed Quinoa	*1786*
Chenopodium Quinoa Seed Extract	*802*
Chenopodium Quinoa Seed	*249*
Chenopodium Quinoa Seed Oil Ethyl Esters	*32*
Hydrolyzed Chenopodium Quinoa Seed (synonym?)	*6*

Ethyl Cyanoacrylate

FOU = 1,659

Definition Ethyl Cyanoacrylate is the ester that conforms to the structure:



***Reported* Function**: **None reported**

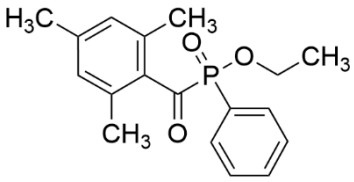
Notes: *(CAS No. 7085-85-0) These 3 ingredients share the same cyanoacrylate core structure and differ only by the alkyl or alkoxy sidechain. This ingredient does not have a reported function but is likely a film former or binder like the other 2 ingredients grouped below.*

CIR draft grouping: (3 ingredients proposed with a total FOU = 1686)	***FOU***
Ethyl Cyanoacrylate	*1659*
Ethoxyethyl Cyanoacrylate	*16*
Methoxyethyl Cyanoacrylate	*11*

Ethyl Trimethylbenzoyl Phenylphosphinate

FOU = 1,627

Definition: Ethyl Trimethylbenzoyl Phenylphosphinate is the organic compound that conforms to the structure:



***Reported* Function**: Light Stabilizers

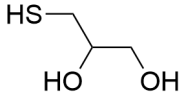
Notes: *(CAS No. 84434-11-7) These 2 ingredients are both light stabilizers and share in common a trimethylbenzoyl phenylphosphine structural core.*

CIR draft grouping: (2 ingredients proposed with a total FOU = 2038)	***FOU***
Ethyl Trimethylbenzoyl Phenylphosphinate	*1627*
Bis-Trimethylbenzoyl Phenylphosphine Oxide	*411*

Thioglycerin

FOU = 1,549

Definition: Thioglycerin is the polyhydric alcohol that conforms to the structure:



Reported **Functions**: Depilating Agents; Hair-Waving/Straightening Agents; Reducing Agents

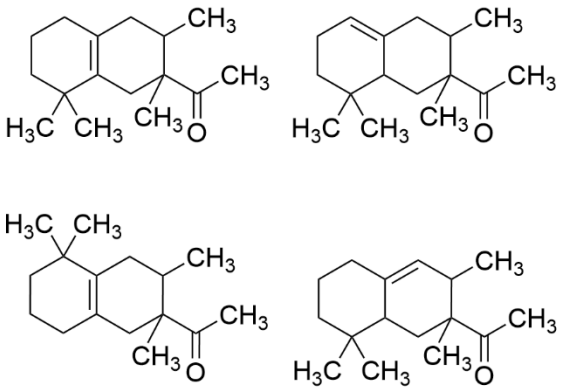
Notes: *(CAS Nos. 38098-46-3; 96-27-5)*

CIR draft grouping: none

Tetramethyl Acetyloctahydronaphthalenes

FOU = 1,505

Definition: Tetramethyl Acetyloctahydronaphthalenes is a mixture of isomers that conforms to the following structures:



Reported **Functions**: Fragrance Ingredients; Skin-Conditioning Agents - Miscellaneous

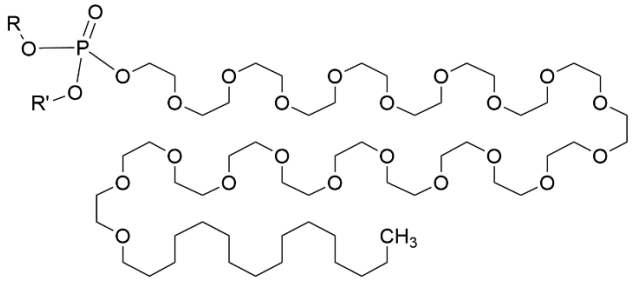
Notes: *(CAS Nos. 54464-57-2; 68155-67-9; 54464-59-4; 68155-66-8) Like Alpha-Isomethyl Ionone above, while this ingredient is used as a fragrance and has a published, RIFM-completed safety assessment for that use, Tetramethyl Acetyloctahydronaphthalenes is also reported to function as a skin conditioning agent – miscellaneous. Accordingly, is the safety assessment for fragrance uses also sufficient for other cosmetic uses/exposures? The function and concentration of this ingredient in many of these 1,505 products is non-obvious.*

CIR draft grouping: none

Ceteth-10 Phosphate

FOU = 1,484

Definition: Ceteth-10 Phosphate is a complex mixture of esters of phosphoric acid and Ceteth-10. Ceteth-10 is the polyethylene glycol ether of cetyl alcohol.



wherein R and R' independently are hydrogen, a salt cation, or another equivalent of ceteth-10.

Reported **Function**: Surfactants - Cleansing Agents

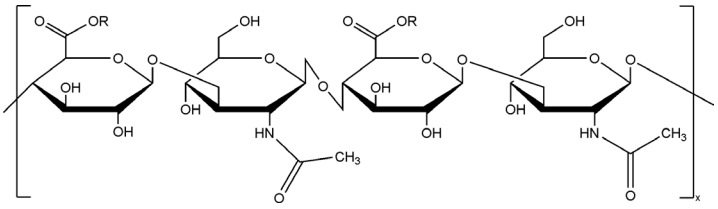
Notes: *(CAS No. unknown) The Panel has previously assessed the safety of a component of this ingredient, ceteth-10, in the Safety Assessment of Alkyl PEG Ethers as Used in Cosmetics, concluding that those Alkyl PEG ethers (including ceteth-10 and similar components for all of the ingredients grouped below) are safe as used when formulated to be nonirritating.*

CIR draft grouping: (9 ingredients proposed with a total FOU = 2,929)	***FOU***
Ceteth-10 Phosphate	*1484*
Oleth-5 Phosphate	*1298*
Di-C12-15 Alketh-2 Phosphate	*3*
Di-C12-15 Alketh-4 Phosphate	*76*
Di-C12-15 Alketh-6 Phosphate	*3*
C12-13 Alketh-2 Phosphate	*2*
C12-15 Alketh-10 Phosphate	*1*
Ceteth-20 Phosphate	*55*
Ceteth-8 Phosphate	*7*

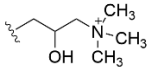
Hydroxypropyltrimonium Hyaluronate

FOU = 1,379

Definition: Hydroxypropyltrimonium Hyaluronate is the quaternary ammonium compound that conforms generally to the structure:



wherein R is hydrogen or hydroxypropyltrimonium:



Reported **Functions**: Film Formers; Humectants

Notes: (*CAS No. unknown*) *The Panel has previously reviewed other hydroxypropyl polysaccharides in the Safety Assessment of Microbial Polysaccharide Gums as Used in Cosmetics, published in 2016, and the Safety Assessment of Galactomannans as Used in Cosmetics, published in 2015.*

Grouping proposal: None

Vaccinium Myrtillus Fruit Extract

FOU = 1,367

Definition: Vaccinium Myrtillus Fruit Extract is the extract of the fruit of *Vaccinium myrtillus* (Bilberry, European blueberry).

***Reported* Function**: Skin-Conditioning Agents - Miscellaneous

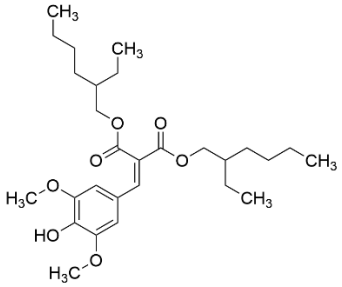
Notes: *(CAS No. 84082-34-8 (generic)) All 10 of these ingredients are derived from the European blueberry plant.*

CIR draft grouping: (10 ingredients proposed with a total FOU = 1,930)	***FOU***
Vaccinium Myrtillus Fruit Extract	*1367*
Vaccinium Myrtillus Fruit/Leaf Extract	*324*
Vaccinium Myrtillus Leaf Extract	*92*
Vaccinium Myrtillus Fruiting Tops (not in INCI; probably means whole fruit)	*57*
Vaccinium Myrtillus Leaf (not in INCI)	*24*
Vaccinium Myrtillus Whole (not in INCI)	*23*
Vaccinium Myrtillus Fruit Juice	*27*
Vaccinium Myrtillus Fruit (not in INCI)	*11*
Vaccinium Myrtillus Bud Extract	*3*
Vaccinium Myrtillus Fruit Water	*2*

Diethylhexyl Syringylidenemalonate

FOU = 1,362

Definition: Diethylhexyl Syringylidenemalonate is the organic compound that conforms to the structure:



***Reported* Functions**: Antioxidants; Light Stabilizers; Skin-Conditioning Agents – Miscellaneous

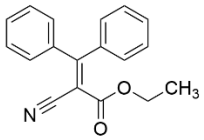
Notes: *(CAS No. 444811-29-4)*

Grouping proposal: None

Etocrylene

FOU = 1,227

Definition: Etocrylene is the organic ester that conforms to the structure:



***Reported* Function**: Light Stabilizers

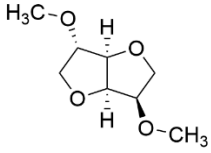
Notes: *(CAS No. 5232-99-5) These 2 ingredients are light stabilizers. Octocrylene is also a sunscreen agent and active ingredient in OTC drug products. Structurally, these 2 chemicals are each alkyl (ethyl or 2-ethylhexyl) esters of 2-cyano-3,3-diphenyl-2-propenoic acid.*

CIR draft grouping: (2 ingredients proposed with a total FOU = 2,784)	***FOU***
Etocrylene	*1227*
Octocrylene	*1557*

Dimethyl Isosorbide

FOU = 1,266

Definition: Dimethyl Isosorbide is a dimethyl ether of an anhydride of an isomer of sorbitol that conforms to the structure:



***Reported* Functions**: Solvents; Viscosity Decreasing Agents

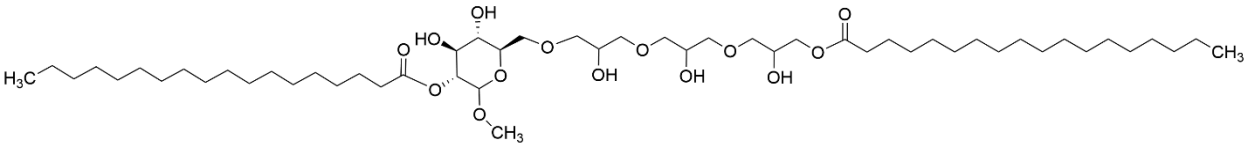
Notes: *(CAS No. 5306-85-4) The Panel has previously assessed the safety of a component of this ingredient, sorbitol, in the Safety Assessment of Mannitol, Sorbitol, and Xylitol as Used in Cosmetics, concluding that these sugar alcohol ingredients are safe in cosmetics in the present practices of use and concentration described in the safety assessment.*

Grouping proposal: None

Polyglyceryl-3 Methylglucose Distearate

FOU = 1,227

Definition: Polyglyceryl-3 Methylglucose Distearate is the diester of stearic acid and the condensation product of methylglucose and Polyglycerin-3.



***Reported* Functions**: Skin-Conditioning Agents – Emollient; Surfactants - Emulsifying Agents

Notes: *(CAS No. unknown)*

Grouping proposal: None

Table 1. Cursory search results for Ethyl Trimethylbenzoyl Phenylphosphinate (84434-11-7)

Source	Link	Data found
PUBMED	-	no relevant data found
ECHA	https://chem.echa.europa.eu/100.075.258/dossier-view/8fceedd2-97ba-4d63-ad2b-f7be9a6a56a8/aa41e181-0e48-4d76-a078-b70c2e20c42e_aa41e181-0e48-4d76-a078-b70c2e20c42e?searchText=84434-11-7	• Acute toxicity oral study • Acute inhalation toxicity study • Acute dermal toxicity study • Acute IP study • Oral repeated dose toxicity studies • Oral developmental tox assays • In vitro genotoxicity assays • Animal skin irritation assay (tested undiluted) • Animal ocular irritation assay (tested undiluted) • LLNA (tested at 10, 25, and 50%)
NICNAS	https://www.industrialchemicals.gov.au/sites/default/files/STD1575%20Public%20Report%20PDF.pdf	• Physical and chemical properties • Acute tox – oral • Acute tox – dermal • Acute tox - inhalation • Skin irritation • Eye irritation • LLNA • Repeated dose toxicity • Genotoxicity ^these studies are likely the same as the ones provided in ECHA • Categorized as category 1B by GHS (skin sensitizer); may cause an allergic skin reaction
SCCS	-	no relevant data
OECD SIDS	-	no relevant data
NTIS	National Technical Reports Library - NTIS	• Results of a dose-range finding study in male and female Wistar rats
NTP	-	No relevant data

Table 2. Cursory search results for Bis-Trimethylbenzoyl Phenylphosphine Oxide (162881-26-7)

Source	Link	Data found
PUBMED	-	no relevant data found
ECHA	Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide 100.102.189 | 0b92bd09-37bb-43c9-a457-f10073c72343 - ECHA CHEM	• Acute oral toxicity • Acute inhalation toxicity • Acute dermal toxicity • Oral repeated dose toxicity assays • Oral DART assay • In vitro and in vivo genotoxicity assays • Animal dermal irritation (concentration not stated) • Animal ocular irritation (tested undiluted) • Guinea pig maximization assays (up to 70%)
NICNAS	-	no relevant data
SCCS	-	no relevant data
OECD SIDS	-	no relevant data
NTIS	National Technical Reports Library - NTIS	• Contact hypersensitivity assay in guinea pigs • Acute oral toxicity study in rats
NTP	-	no relevant data found

Distributed for Comment Only -- Do Not Cite or Quote

Personal Care Products Council
Committed to Safety, Quality & Innovation

Memorandum

TO: Bart Heldreth, Ph.D.
Executive Director - Cosmetic Ingredient Review

FROM: Alexandra Kowcz, MS, MBA
Industry Liaison to the CIR Expert Panel

DATE: March 11, 2025

SUBJECT: Draft 2026 Priorities (draft prepared for the March 13-14, 2025 meeting)

The Personal Care Products Council respectfully submits the following comments on the draft 2026 Priorities.

As part of the memo, it would be helpful to include the list of reports that are ongoing from the 2024-2025 priorities list as well as the rereviews that are opened, and still being worked on, and the new rereviews that will need to be considered in 2026.

If an ingredient has been reviewed by RIFM, it should not be reviewed by CIR, even if the fragrance ingredient has a function in addition to fragrance. Alpha-Isomethyl Ionone and Tetramethyl Acetyloctahydronaphthalenes should be removed from the 2026 CIR Priorities list.

Consider adding Hydroxypropyltrimonium Hyaluronate to the 2015 Trimonium report when it is considered for rereview.

Please consider not including non-INCI ingredients with uses reported to the RLD when their identity is uncertain. For example, the identity of the non-INCI ingredient Vaccinium Myrtillus Fruit is clear so it should be included in the report. But the identity of Vaccinium Myrtillus Whole is not clear so it should not be included in the report. As a compromise, perhaps the introduction of the early drafts of the report should note the ingredients for which the identity is not clear and request additional information on the identity. If no additional information on the identity of these ingredients is provided, they should be removed from the final report.

Distributed for Comment Only -- Do Not Cite or Quote

Personal Care Products Council
Committed to Safety, Quality & Innovation

Memorandum

TO: Bart Heldreth, Ph.D.
Executive Director – Cosmetic Ingredient Review (CIR)

FROM: Hair Coloring Technical Committee (HCTC) of the Personal Care Products Council

DATE: April 1, 2025

SUBJECT: Hair Dye Ingredient Recommended for Inclusion in the 2026 CIR Priority List of Ingredients

The Hair Coloring Technical Committee (HCTC) recommends that the hair dye Basic Orange 31 be included as the hair dye ingredient in the 2026 priority list of ingredients for review by CIR. This hair dye ingredient has been reviewed by the European Scientific Committee on Consumer Safety (SCCS). The most recent (2011) opinion is available at: https://health.ec.europa.eu/document/download/3fcdd825-8099-43a0-bdca-0043fca3a316_en.