

ADMIN

Priorities

EXPERT PANEL MEETING  
September 26-27, 2022



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## **Memorandum**

Date: September 1<sup>st</sup>, 2022

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

To: All Stakeholders

Re: 2023 Draft Final Priority List

The CIR Procedures require preparation of the 2023 Draft Priority List for public comment by June 1, 2022. This list was provided to the Panel and reviewed at the March 2022 meeting; comments made at the March meeting have been considered and incorporated into this 2023 Draft Final Priority List. The priority list is typically based on stakeholder requests for cause (e.g., a hair dye) and frequency of use (FOU) data from FDA's Voluntary Cosmetic Registration Program (VCRP); this year, VCRP data were received from the FDA on January 11 (in response to a Freedom of Information Act request).

While this list includes only the lead ingredients, groupings of ingredients, drafted by CIR Staff, can be found on the following pages. There are 17 reports proposed, covering 75 ingredients, on the 2023 Draft Priorities List. (Two of the ingredients on this list are proposed to be grouped together in 1 report.) This list includes a proposal of a hair dye for assessment received from the PCPC Hair Color Technical Committee (HCTC; proposal included as *HCTC recommendation\_2023DraftFinal Priorities\_092022*). Additionally, this list includes the prostaglandin analogues the Panel agreed to in June; the CIR SCC has provided comments on this grouping (comments included as *CIR SCC comments\_2023Draft-FinalPriorities\_092022*). Reports previously prioritized and on the CIR docket at the end of 2022, as well as an extensive number of re-reviews of previous assessments, will supplement the total number of reports/ingredients to be assessed in 2023.

Once the priority list is finalized, interested parties are encouraged to submit pertinent data to the CIR, as soon as possible, for use in the development of the Scientific Literature Reviews for these ingredients. Although the specific data needs vary for each safety assessment, the following are typical data that the Panel reviews for each safety assessment.

- Chemistry, impurities, and method of manufacture, specific to use in cosmetics
- Toxicokinetics data, specifically dermal absorption and/or penetration
- Repeated-dose toxicity data
- Inhalation toxicity data, if the ingredient is used in a product that can be incidentally inhaled

- Reproductive/developmental toxicity data
- Genotoxicity data; if positive, carcinogenicity data may be needed
- Dermal irritation and sensitization data at maximum concentration of use

For the review of botanical ingredients, the additional data needed include: species, plant part, extraction method, solvent, and data on component chemical characterization. It is important that these data are specific for the ingredient(s) as used in cosmetics.

### **2023 Draft Final Priorities List**

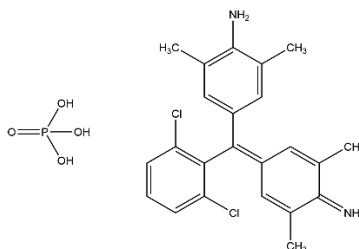
| <b>Ingredients</b>  | <b>Frequency of Use (FOU)<br/>Data Year 2022</b> |
|---|--|
| <b><i>For cause</i></b>   |  |
| <b><i>HC Blue No. 15</i></b>  | <b>22</b>  |
| <b><i>Prostaglandin analogues</i></b>                                 | <b>"3"</b>                                       |
| <b><i>Per FOU</i></b>   |  |
| <b>Sodium Hydrosulfite</b>  | <b>246</b>                                       |
| <b>Pelargonium Graveolens Flower Oil</b>                              | <b>236</b>                                       |
| <b>Phytosteryl/Isostearyl/Cetyl/Stearyl/Behenyl Dimer Dilinoleate</b> | <b>234</b>                                       |
| <b>Diglycerin</b>   | <b>211</b>                                       |
| <b>Polyglycerin-3</b>   | <b>208</b>                                       |
| <b>Sigesbeckia Orientalis Extract</b>                                 | <b>202</b>                                       |
| <b>Houttuynia Cordata Extract</b>                                     | <b>201</b>                                       |
| <b>Malva Sylvestris (Mallow) Extract</b>                              | <b>198</b>                                       |
| <b>Palmitoyl Pentapeptide-4</b>                                       | <b>198</b>                                       |
| <b>Salix Alba (Willow) Bark Extract</b>                               | <b>197</b>                                       |
| <b>Centaurea Cyanus Flower Extract</b>                                | <b>196</b>                                       |
| <b>Lactobacillus Ferment</b>  | <b>196</b>                                       |
| <b>Copper Gluconate</b>   | <b>192</b>                                       |
| <b>Inositol</b>   | <b>190</b>                                       |
| <b>Paeonia Suffruticosa Root Extract</b>                              | <b>189</b>                                       |
| <b>Nelumbo Nucifera Flower Extract</b>                                | <b>182</b>                                       |

## **2023 Draft Final Priorities Groupings for New Reports**

### **Proposed 2023 Reports – per cause**

#### **HC Blue No. 15 – proposed PCPC Hair Color Technical Committee(HCTC)**

FOU = 22



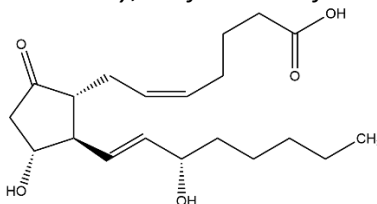
**Reported Function:** Hair Colorant

**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 Panel review. The HCTC typically submits a proposed hair dye ingredient between the 1<sup>st</sup> and 2<sup>nd</sup> meetings of the year.

**Grouping:** None

#### **Prostaglandins analogs – e.g., Isopropyl Cloprostenate FOU = 3**

– Alert from Dr. Belsito about SCCS activity; conformation from FDA about cosmetic use



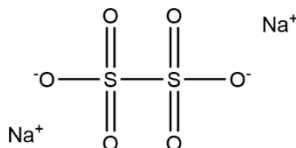
prostaglandin

**Reported Functions:** Hair Conditioning Agents; Eyelash Conditioning Agents; Nail Conditioning Agents; Antimicrobial Agents; Antioxidants; Skin-Conditioning Agents - Miscellaneous

**Notes:** These are prostaglandin analogs that might be in use as cosmetic ingredients, despite more common usage as drugs.

**Grouping: (14 ingredients proposed with a total FOU = 3)**

|   | <b><u>FOU</u></b> |
|---|-------------------|
| Isopropyl Cloprostenate                   | 3                 |
| Dehydrolatanoprost                        | -                 |
| Ethyl Tafluprostamide                     | -                 |
| Bimatoprost                               | -                 |
| Cyclopropylbimatoprost                    | -                 |
| Cloprostenol                              | -                 |
| Travoprost                                | -                 |
| Dihydroxypropyl Didehydrolatanoprostamide | -                 |
| Norbimatoprost                            | -                 |
| Nortafluprost                             | -                 |
| Trifluoromethyl Dehydrolatanoprost        | -                 |
| Methyl Bimatoprost Acidate                | -                 |
| Noralfaprostol & Travoprostamide          | - & -             |

**Proposed 2023 Reports – per FOU****Sodium Hydrosulfite****FOU = 246****Definition:** Sodium Hydrosulfite is the inorganic salt that conforms to the formula  $\text{Na}_2\text{S}_2\text{O}_4$ .**Reported Function:** Reducing Agents**Grouping:** None**Pelargonium Graveolens Flower Oil****FOU = 236****Definition:** Pelargonium Graveolens Flower Oil is the volatile oil obtained from the flowers of *Pelargonium graveolens*.**Reported Functions:** Fragrance Ingredients; Skin-Conditioning Agents - Miscellaneous**Notes:** (CAS Nos. 90082-51-2 (generic) and 8000-46-2) Pelargonium Graveolens Oil (FOU 179), Pelargonium Graveolens Leaf Oil (FOU 13), and Pelargonium Graveolens Flower/Leaf/Stem Water (FOU 9) are fragrance only ingredients.**Grouping:** (5 ingredients proposed with a total FOU = 294)

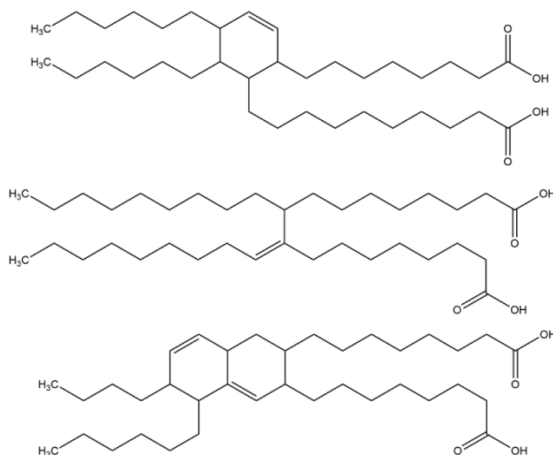
|   | <b><u>FOU</u></b> |
|---|-------------------|
| <i>Pelargonium Graveolens Flower Oil</i>                    | 236               |
| <i>Pelargonium Graveolens Extract</i>                       | 49                |
| <i>Pelargonium Graveolens Flower Water</i>                  | 4                 |
| <i>Pelargonium Graveolens Flower Extract</i>                | 3                 |
| <i>Pelargonium Graveolens Leaf Extract (VCRP name only)</i> | 2                 |

## Phytosteryl/Isostearyl/Cetyl/Stearyl/Behenyl

FOU = 234

### Dimer Dilinoleate

**Definition:** Phytosteryl/Isostearyl/Cetyl/Stearyl/Behenyl Dimer Dilinoleate is the ester of Dilinoleic Acid with a mixture of Phytosterols, Isostearyl Alcohol, Cetyl Alcohol, Stearyl Alcohol, and Behenyl Alcohol.



wherein the carboxylic acid functional groups are esterified with Phytosteryl, Isostearyl, Cetyl, Stearyl, and/or Behenyl chains.

**Reported Functions:** Hair Conditioning Agents; Skin-Conditioning Agents - Occlusive; Viscosity Increasing Agents – Nonaqueous

**Notes:** Final Amended Safety Assessment of Dialkyl Dimer Dilinoleates as Used in Cosmetics finalized in 2018 with a safe as used conclusion for all 8 ingredients therein. Final assessment on Diisostearyl Polyglyceryl-3 Dimer Dilinoleate finalized in 2016 with a safe when formulated to be non-irritating conclusion.

**Grouping: (7 ingredients proposed with a total FOU = 398)**

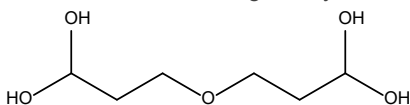
|   | <b><u>FOU</u></b> |
|---|-------------------|
| Phytosteryl/Isostearyl/Cetyl/Stearyl/Behenyl Dimer Dilinoleate        | 234               |
| Bis-Behenyl/Isostearyl/Phytosteryl Dimer Dilinoleyl Dimer Dilinoleate | 82                |
| Stearyl/PPG-3 Myristyl Ether Dimer Dilinoleate                        | 33                |
| Dimer Dilinoleyl Dimer Dilinoleate                                    | 23                |
| Bis-Behenyl/Phytosteryl Dimer Dilinoleate                             | 19                |
| Phytosteryl Isostearyl Dimer Dilinoleate                              | 6                 |
| Octyldodecyl/PPG-3 Myristyl Ether Dimer Dilinoleate                   | 1                 |

## Diglycerin & Polyglycerin-3

FOU = 211

FOU = 208

**Definition:** Diglycerin is a dimer of Glycerin. Dimerization (and resultant connectivity) can occur at any of the alcohol groups (although less substituted alcohols are energetically favored (i.e., primary > secondary >> tertiary).



**Reported Functions:** Humectants; Skin-Conditioning Agents - Humectant

**Notes:** (CAS No. 59113-36-9) Polyglycerin-3 is essentially "triglycerin."

**Grouping:** (4 ingredients proposed with a total FOU = 451)

Diglycerin

**FOU**

211

Polyglycerin-3

208

Polyglycerin-10

29

Polyglycerin-6

3

## Sigesbeckia Orientalis Extract

FOU = 202

**Definition:** Sigesbeckia Orientalis Extract is the extract of *Sigesbeckia orientalis*.



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

**Notes:** VCRP name is "*Sigesbeckia Orientalis* (Eastern St. Paul's Wort) Extract"

**Grouping:** None

## Houttuynia Cordata Extract

FOU = 201

**Definition:** Houttuynia Cordata Extract is the extract of the herb, *Houttuynia cordata*.



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

**Notes:** (CAS No. 164288-50-0)

**Grouping:** (2 ingredients proposed with a total FOU = 203)

*Houttuynia Cordata Extract*

*Houttuynia Cordata Powder*

**FOU**

201

2

## Malva Sylvestris (Mallow) Extract

FOU = 198

**Definition:** Malva Sylvestris (Mallow) Extract is the extract of the whole plant, *Malva sylvestris*.



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

**Notes:** Related to *Althaea officinalis* or marshmallow.

**Grouping:** (8 ingredients proposed with a total FOU = 287)

*Malva Sylvestris (Mallow) Extract*

*Malva Sylvestris (Mallow) Flower Extract*

*Malva Sylvestris (Mallow) Flower/Leaf/Stem Extract*

*Malva Sylvestris (Mallow) Flower/Leaf Extract*

*Malva Sylvestris (Mallow) Leaf Extract*

*Malva Sylvestris (Mallow) Oil (VCRP name only)*

*Malva Sylvestris (Mallow) Leaf Powder*

*Malva Sylvestris (Mallow) Flower*

**FOU**

198

72

5

4

4

2

1

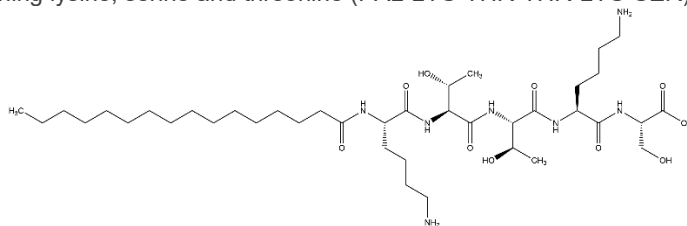
1



## Palmitoyl Pentapeptide-4

FOU = 198

**Definition:** Palmitoyl Pentapeptide-4 is the reaction product of palmitic acid and Pentapeptide-4. Pentapeptide-4 is a synthetic peptide containing lysine, serine and threonine (PAL-LYS-THR-THR-LYS-SER).



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

**Notes:** (CAS Nos. 214047-00-4 & 521091-64-5) the 3 proposed ingredients all share the same peptide sequence

**Grouping:** (3 ingredients proposed with a total FOU = 202)

Palmitoyl Pentapeptide-4

Pentapeptide-4

Myristoyl Pentapeptide-4

FOU

198

1

3

## Salix Alba (Willow) Bark Extract

FOU = 197

**Definition:** Salix Alba (Willow) Bark Extract is the extract of the bark of *Salix alba*.



**Reported Functions:** Hair Conditioning Agents; Skin-Conditioning Agents - Occlusive

**Notes:** (CAS No. 84082-82-6) Willow tree

**Grouping:** (2 ingredients proposed with a total FOU = 238)

Salix Alba (Willow) Bark Extract

Salix Alba (Willow) Leaf Extract

FOU

197

41

## Centaurea Cyanus Flower Extract

FOU = 196

**Definition:** Centaurea Cyanus Flower Extract is the extract of the flowers of the cornflower, *Centaurea cyanus*.



**Reported Functions:** Cosmetic Astringents; Skin-Conditioning Agents - Miscellaneous

**Notes:** (CAS No. 84012-18-0) "Cornflower"

**Grouping:** (3 ingredients proposed with a total FOU = 265)

|   | <u>FOU</u> |
|---|------------|
| Centaurea Cyanus Flower Extract                 | 196        |
| Centaurea Cyanus Flower Water                   | 68         |
| Centaurea Cyanus Flower Petals (VCRP name only) | 1          |

## Lactobacillus Ferment

FOU = 196

**Definition:** Lactobacillus Ferment is the product obtained through fermentation by the microorganism, *Lactobacillus*.

**Reported Functions:** Not Reported

**Notes:** (CAS No. 2380025-37-4 (generic)) Probiotics?

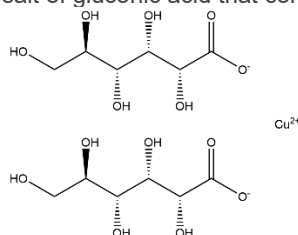
**Grouping:** (4 ingredients proposed with a total FOU = 213)

|                                       | <u>FOU</u> |
|---------------------------------------|------------|
| Lactobacillus Ferment                 | 196        |
| Lactobacillus Ferment Lysate          | 8          |
| Lactobacillus Ferment Lysate Filtrate | 6          |
| Lactobacillus Ferment Filtrate        | 3          |

## Copper Gluconate

FOU = 192

**Definition:** Copper Gluconate is the copper salt of gluconic acid that conforms to the formula:



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

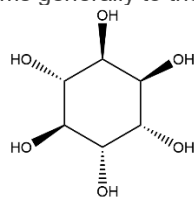
**Notes:** (CAS No. 527-09-3)

**Grouping:** None

## Inositol

FOU = 190

**Definition:** Inositol is the cyclic polyol that conforms generally to the formula:



**Reported Function:** Hair Conditioning Agents; Humectants

**Notes:** (CAS Nos. 643-12-9 & 87-89-8)

**Grouping:** None

## Paeonia Suffruticosa Root Extract

FOU = 189

**Definition:** Paeonia Suffruticosa Root Extract is the extract of the roots of *Paeonia suffruticosa*.



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

**Notes:** (CAS No. 223747-88-4 (generic))

**Grouping:** (5 ingredients proposed with a total FOU = 216)

*Paeonia Suffruticosa* Root Extract

**FOU**

189

*Paeonia Suffruticosa* Extract

13

*Paeonia Suffruticosa* Bark Extract

7

*Paeonia Suffruticosa* Seed Oil

5

*Paeonia Suffruticosa* (Tree Peony) Root Bark Extract (VCRP name only)

2

## Nelumbo Nucifera Flower Extract

FOU = 182

**Definition:** Nelumbo Nucifera Flower Extract is the extract of the flower of *Nelumbo nucifera*.



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

**Notes:** (CAS No. 85085-51-4 (generic)) "Lotus"

**Grouping: (13 ingredients proposed with a total FOU = 285)**

|   | <u>FOU</u> |
|---|------------|
| <i>Nelumbo Nucifera Flower Extract</i>              | 182        |
| <i>Nelumbo Nucifera Seed Extract</i>                | 26         |
| <i>Nelumbo Nucifera Leaf Extract</i>                | 17         |
| <i>Nelumbo Nucifera Root Extract</i>                | 16         |
| <i>Nelumbo Nucifera Flower Water</i>                | 14         |
| <i>Nelumbo Nucifera Flower Oil (VCRP name only)</i> | 9          |
| <i>Nelumbo Nucifera Callus Culture Extract</i>      | 7          |
| <i>Nelumbo Nucifera Germ Extract</i>                | 8          |
| <i>Nelumbo Nucifera Extract</i>                     | 2          |
| <i>Nelumbo Nucifera Stamen Extract</i>              | 1          |
| <i>Nelumbo Nucifera Flower/Leaf/Stem Juice</i>      | 1          |
| <i>Nelumbo Nucifera Seed Powder</i>                 | 1          |
| <i>Nelumbo Nucifera Root Water</i>                  | 1          |



**TO:** Bart Heldreth Ph.D.  
Executive Director – Cosmetic Ingredient Review

**FROM:** CIR Science and Support Committee of the Personal Care Products Council

**DATE:** August 2, 2022

**SUBJECT:** 2023 Priorities: Prostaglandin Analogues

The CIR Science and Support Committee (CIR SSC) appreciates the opportunity to comment on the inclusion of prostaglandin analogues on the 2023 priority list.

We recommend that the Expert Panel for Cosmetic Ingredient Safety focus their review on the prostaglandin analogue that has uses reported to the FDA Voluntary Cosmetic Registration Program (VCRP) (Isopropyl Cloprostenate), and ingredients that are structurally related to the in-use ingredient that are expected to have similar activity as the lead ingredient. During the June 2022 meeting, members of the Expert Panel indicated that pharmacologic activity varies among prostaglandin analogues and that read-across would not be appropriate. Therefore, it would be helpful if the first review of this class of ingredients focused on the in-use ingredient rather than trying to identify the data on all the prostaglandin analogues reviewed in the opinion of the European Scientific Committee on Consumer Safety (SCCS).

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

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

**DATE:** March 31, 2022

**SUBJECT:** Hair Dye Ingredient Recommended for Inclusion in the 2023 CIR Priority List of Ingredients

The Hair Coloring Technical Committee (HCTC) recommends that the hair dye HC Blue No. 15 be included as the hair dye ingredient in the 2023 priority list of ingredients for review by CIR. HC Blue No. 15 has 22 uses reported in the 2022 FDA Voluntary Cosmetic Registration Program (VCRP). This hair dye ingredient has been reviewed by the European Scientific Committee on Consumer Safety (SCCS). The opinion is available at: [Opinion of the Scientific Committee on Consumer Safety on HC Blue 15 \(C182\) \(europa.eu\)](#)