Post Meeting Announcement

Expert Panel for Cosmetic Ingredient Safety
155th Meeting (September 14-15, 2020) - Findings

September 18, 2020

● Final Safety Assessments

- **Caprylhydroxamic Acid – 1 ingredient – Safe**
- **Adenosine – 5 ingredients – Safe**
- **Methylisothiazolinone – 1 ingredient – Safe with qualifications**
- **Ascorbyl Glucoside – 2 ingredients – Safe**
- ***Scutellaria baicalensis* – 4 ingredients – Split conclusion (safe; insufficient for various endpoints)**

● Tentative Safety Assessments

- **Acetyl Hexapeptide-8 Amide – 1 ingredient – Safe**
- **Benzophenones – 11 ingredients – Safe**
- **Coconut – 10 ingredients – Split conclusion (safe; insufficient for various endpoints)**
- **Polysilicone-11 – 1 ingredient – Safe**

● Insufficient Data Announcements

- **Saccharide Humectants – 7 ingredients**
- **Levulinic Acid – 2 ingredients**
- **Ubiquinone – 4 ingredients**
- **Amino Acid Diacetates – 2 ingredients**
- **Silicates – 24 ingredients**
- **Diacetone Alcohol – 1 ingredient**
- **Red Algae – 60 ingredients**

● 155th Meeting Notes

- **Director's Report**
- **Rereview Summaries**
  - **Quaternium-18**
  - **Sulfites**
- **Final 2021 Priorities**
- **Scientific Literature Reviews – available or under development**
- **Next Expert Panel Meeting – Monday and Tuesday, December 7-8, 2020**

Final Safety Assessments

Final safety assessments will be posted on the 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 Unpublished data cited as references in CIR safety assessments are available for review.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.

Caprylhydroxamic Acid

The Panel issued a Final Report with the conclusion that Caprylhydroxamic Acid is safe in cosmetics in the present practices of use and concentration described in this safety assessment.

The Panel was concerned with inconsistent outcomes regarding dermal sensitization. However, upon further review, the Panel determined that cases of increased sensitization with the use of a moisturizer in Finland (a product that had been reformulated to include Caprylhydroxamic Acid) appeared to be related to use on damaged skin, which most likely resulted in increased penetration. Therefore, the Panel stated that caution should be taken with use of Caprylhydroxamic Acid in a manner that would result in increased penetration, such as formulations with penetration enhancers. This is especially important in product types with a margin of safety (MOS), based on an acceptable exposure level/consumer exposure level (AEL/CEL) ratio at or near 1, as calculated in a quantitative risk assessment (QRA). According to the results of a QRA that was submitted to CIR, product types with an AEL/CEL of 1 include baby lotions, oils, and creams; the weight of evidence (WoE) no expected sensitization induction level (NESIL) used in the QRA was 1056 µg/cm^2. This QRA did not consider penetration enhancers or damaged skin.

Previously, the Panel had also discussed the theoretical possibility of *N*-nitrosation. However, upon further review, the Panel found nitrosamine formation unlikely.

Adenosine Ingredients

The Panel issued a Final Report with the conclusion that Adenosine, Adenosine Phosphate, Adenosine Triphosphate, Disodium Adenosine Phosphate, and Disodium Adenosine Triphosphate are safe in the present practices of use and concentration described in the safety assessment. The safety of this ingredient group was supported by sufficient impurities data, negative animal oral toxicity assays, negative human dermal irritation/sensitization assays, and low concentrations of use. The Panel noted the effects of Adenosine administered via a nebulizer in asthmatic patients and determined that these effects would not be pertinent to cosmetic exposure as delivery of Adenosine via cosmetic products would result in a much lower exposure than that of a nebulizer.

Methylisothiazolinone

The Panel issued a Final Amended Report with the conclusion that Methylisothiazolinone (MI) is safe for use in rinse-off cosmetic products at concentrations up to 100 ppm and safe in leave-on cosmetic products when they are formulated to be non-sensitizing, which may be determined based on a (QRA).

The Panel's recommendations for MI in rinse-off and leave-on cosmetic products are intended to prevent the induction of sensitization to MI. However, the Panel cautioned that following these recommendations may not necessarily prevent the elicitation of allergic reactions in individuals who are already allergic to MI. Individuals sensitized to MI should avoid products that contain MI.

In response to concerns of reports of adverse events observed in infants following inhalation exposure to humidifier disinfectants that contained the preservative mixture Methylchloroisothiazolinone/Methylisothiazolinone (MCI/MI), the Panel moved to reopen the safety assessment of MI in September 2019. A search of inhalation toxicity to MI (separate from the combination of MCI/MI) did not yield any new published literature; however, studies were detailed in the MCI/MI report. The Panel reviewed a 13-wk repeated-dose inhalation study of MCI/MI in rats and determined that the data mitigated concern for the use of MI at the reported concentrations in cosmetic products that could be incidentally inhaled following use. The Panel also reviewed a draft risk assessment for MCI/MI produced by the US EPA and determined that the analyses of exposures to paints, textile, and household cleaning products were not relevant to the assessment of cosmetic safety due to exposure duration and concentrations of application being magnitudes greater than those of cosmetic use.

Ascorbyl Glucoside Ingredients

The Panel concluded that Ascorbyl Glucoside and Sodium Ascorbyl Glucoside are safe in cosmetics in the present practices of use and concentration described in the safety assessment, and issued a Final Report.

Ascorbyl Glucoside has been identified as an ingredient in commercial bleaching cosmetics (also contain kojic acid), at concentrations of ~2%. After reviewing in vitro data relating to a potential skin depigmentation effect, the Panel stated that this ingredient may not actually be a skin bleaching agent. The Panel noted that skin lightening is considered to be a drug effect in the US, and should not occur during the use of cosmetic products. Based on the current use concentrations of Ascorbyl Glucoside in cosmetic products (up to 5% in leave-on products), the results of the in vitro experiment, and clinical experience, concern for this effect in cosmetics was mitigated. Nevertheless, the Panel noted that cosmetic formulators should only use Ascorbyl Glucoside in products in a manner that does not cause depigmentation.

The Panel also noted the absence of developmental and reproductive toxicity data on Ascorbyl Glucoside and Sodium Ascorbyl Glucoside. However, concern over the lack of these data was mitigated, considering that Ascorbyl Glucoside is metabolized into ascorbic acid and glucose in the skin, and would not be absorbed, intact, in an appreciable quantity. Additionally, concern was further mitigated because both of these substances are essential constituents of the body.

Finally, the Panel discussed the issue of incidental inhalation exposure from the use of Ascorbyl Glucoside in pump and aerosol hair spray formulations and in face powders; the maximum reported concentration of use in these types of products is 0.01% in hair sprays and 2% in face powders. The Panel stated that droplets/particles deposited in the nasopharyngeal or bronchial regions of the respiratory tract present no toxicological concerns based on the properties of Ascorbyl Glucoside or Sodium Ascorbyl Glucoside.

***Scutellaria baicalensis*-Derived Ingredients**

The Panel concluded that Scutellaria Baicalensis Root Extract and Scutellaria Baicalensis Root Powder are safe in cosmetics in the present practices of use and concentration described in the safety assessment, and issued a Final Report.

However, the Panel also concluded that the available data are insufficient to make a determination that Scutellaria Baicalensis Extract and Scutellaria Baicalensis Sprout Extract are safe under the intended conditions of use in cosmetic formulations. The data needed to determine the safety of these two ingredients comprise method of manufacture, composition, impurities, dermal absorption, 28-day dermal toxicity, genotoxicity, phototoxicity, skin irritation, and sensitization data.

The Panel initially expressed concern over the statistically significant, dose-dependent increase in the incidence of skeletal variations (presence of lumbar ribs) in developmental and reproductive toxicity studies on a *Scutellaria baicalensis* root extract (aqueous extract) involving Sprague-Dawley rats. However, after further

review of the data, the Panel agreed that the study results suggest that the appearance of lumbar ribs induced by the test material was a transient fetal variation rather than teratogenicity or maternal toxicity.

The genotoxicity of *Scutellaria baicalensis* root extracts (methanol extract and aqueous extract) was evaluated in the *Bacillus subtilis* rec-assay using strains H17 Rec+ and M45 Rec- without metabolic activation. Results were positive for the methanol extract and negative for the aqueous extract. However, in Ames tests, results were positive for the aqueous extract and negative for the methanol extract. After an initial review of these data, the Panel noted that, given the mixed results, a repeat of these assays and the addition of another assay (mammalian system) would be needed in order to develop a weight of evidence approach for evaluating the genotoxicity of Scutellaria Baicalensis Root Extract. Subsequently, negative Ames test results on a trade name mixture containing 33.33% Scutellaria Baicalensis Root Extract (aqueous extract) were received, and the Panel agreed that these data support the safety of Scutellaria Baicalensis Root Extract in cosmetic products.

In vitro studies indicated that ethanol and methanol extracts (but not n-hexane, ethyl acetate, and water extracts) could have an inhibitory effect on melanogenesis. However, the Panel noted that skin lightening is considered to be a drug effect and should not occur during the use of cosmetic products. Because of that caveat, and based on the low concentrations of use of Scutellaria Baicalensis Root Extract in cosmetic products, the results of these in vitro experiments on Scutellaria Baicalensis Root Extract, and clinical experience, concern for this effect in cosmetics was mitigated. Nevertheless, the Panel noted that cosmetic formulators should only use Scutellaria Baicalensis Root Extract in products in a manner that does not cause depigmentation.

After considering that Scutellaria Baicalensis Root Extract is being used in suntan products and the in vitro data on the potential inhibitory effect of Scutellaria Baicalensis Root Extract on melanogenesis, the Panel noted that phototoxicity data on Scutellaria Baicalensis Root Extract and other *Scutellaria baicalensis*-derived ingredients may be needed. In response to this concern, negative in vitro phototoxicity data on a trade name mixture containing 33.33% Scutellaria Baicalensis Root Extract (aqueous extract) were received, mitigating these concerns.

Tentative Safety Assessments

*For those tentative safety assessments below to be posted on the CIR website at www.cir-safety.org on or before **September 25, 2020**, interested persons are given 60 days from the posting date (**November 25, 2020**) to comment, provide information, and/or request an oral hearing before the Expert Panel for Cosmetic Ingredient Safety. 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 November 25, 2020 for full consideration. Submissions received thereafter may be in jeopardy of not being considered by the Panel.** The updated reports may be scheduled for review by the Expert Panel as early as at its **December 7-8, 2020** meeting. However, some of the tentative safety assessments below may be posted later (with an appropriate 60-day comment period) and likely be scheduled for review by the Panel at its **March 11-12, 2021** meeting.*

Acetyl Hexapeptide-8 Amide

The Panel concluded that Acetyl Hexapeptide-8 Amide is safe in cosmetics in the present practices of use and concentration described in the safety assessment, and issued a Tentative Report.

Acetyl Hexapeptide-8 Amide (CAS No. 616204-22-9), the subject of this safety assessment, is defined as the product obtained by the acetylation of hexapeptide-8 in which the C-terminus is an amide. The sequence for this acetylated and amidated peptide is Ac-Glu-Glu-Met-Gln-Arg-Arg-NH_2.

The Panel noted the absence of systemic toxicity and genotoxicity data on Acetyl Hexapaptide-8 Amide. However, concern over the lack of these data was mitigated, after considering the peptide structure of this ingredient and associated low log $K_{o/w}$ value of -7.68 (i.e. percutaneous absorption is unlikely), and the low maximum use concentration of 0.005% in leave-on cosmetic products. The Panel determined that these findings support the safe use of Acetyl Hexapeptide-8 Amide in cosmetic products.

Finally, the Panel discussed the issue of incidental inhalation exposure from the use of Acetyl Hexapeptide-8 Amide in face powders at concentrations up to 0.0001%. It was noted that conservative estimates of inhalation exposures to respirable particles during the use of loose powder cosmetic products are 400-fold to 1000-fold less than protective regulatory and guidance limits for inert airborne respirable particles in the workplace.

Benzophenones

The Panel published a safety assessment of benzophenones with the following conclusion in 1983: On the basis of the available animal data and clinical human experience presented in this report, the Panel concluded that Benzophenones-1, -3, -4, -5, -9, and -11 are safe for topical application to humans in the present practices of use and concentration in cosmetics. During the same year, the Panel also published an addendum to this published safety assessment, having concluded that Benzophenones-2, -6, and -8 are not mutagenic or genotoxic and that the published conclusion on Benzophenones-1, -3, -4, -5, -9, and -11 is applicable to these 3 ingredients.

The Panel elected to defer its next rereview of these ingredients until the National Toxicology Program (NTP) completed an assessment of benzophenone carcinogenicity. An NTP oral carcinogenicity study on Benzophenone-3 was published in May 2020, and results from this study have been reviewed by the Panel, along with other safety test data on this ingredient and the other ingredients in this report that have been identified in the published literature since the original safety assessment was published in 1983. After considering new studies and updated use data on these ingredients, the Panel determined that the safety assessment should be reopened and issued a Tentative Amended Report with the conclusion that Benzophenones-1, -2, -3, -4, -5, -6, -8, -9, -10, -11, and -12 are safe in cosmetics in the present practices of use and concentration described in this safety assessment.

The Panel reviewed a number of systemic toxicity studies on benzophenones. However, the Panel noted that these studies were performed at high concentrations that are not relevant to cosmetic exposure. The NTP oral carcinogenicity study on Benzophenone-3 reviewed by the Panel involved rats and mice. Results indicated equivocal evidence of carcinogenicity, i.e., male rats with benign thyroid tumors and malignant meningiomas in the absence of a dose response, and no evidence of carcinogenicity in mice. Based in part on these results, the Panel expressed a lack of concern over the carcinogenic potential of benzophenones as used in cosmetic products.

In Europe, Benzophenone-3 is permitted in cosmetics at concentrations up to 0.5% to protect formulations from photodegradation, and at concentrations up to 6% as a sunscreen ingredient. The Panel agreed that it should be recognized that sunscreens are classified as cosmetics in Europe, but are classified as over-the-counter drugs in the United States. Furthermore, the Panel emphasized that, in the United States, Benzophenone-3 functions only as a light stabilizer in cosmetic products.

The issue of incidental inhalation exposure from the use of Benzopheone-3 and Benzophenone-4 in cosmetic products was discussed by the Panel. Benzophenone-3 is being used in aerosol hair spray (maximum concentration of 0.014%), pump hair spray (maximum concentration of 0.05%), and in pump deodorant spray (at maximum concentration of 0.08%). Benzophenone-4 is also being used in aerosol hair spray (maximum concentration of 0.015%) and pump hair spray (maximum concentrations of 0.001% to 0.1%). Relative to these uses, the Panel stated that droplets/particles deposited in the nasopharyngeal or bronchial regions of the respiratory tract present no toxicological concerns based on the properties of Benzophenone-3 or Benzophenone-4. Benzophenone-3 is also being used in face powders (use concentrations unknown). The Panel noted that conservative estimates of inhalation exposures to respirable particles during the use of loose powder cosmetic products are 400-fold to 1000-fold less than protective regulatory and guidance limits for inert airborne respirable particles in the workplace.

Coconut-Derived Ingredients

The Panel issued a Tentative Report for public comment with the conclusion that the following 7 *Cocos nucifera* (coconut)-derived ingredients are safe in the present practices of use and concentration described in the safety assessment:

Cocos Nucifera (Coconut) Fruit
Cocos Nucifera (Coconut) Fruit Extract
Cocos Nucifera (Coconut) Fruit/Fruit Juice Extract
Cocos Nucifera (Coconut) Fruit Juice
Cocos Nucifera (Coconut) Fruit Powder
Cocos Nucifera (Coconut) Fruit Water
Cocos Nucifera (Coconut) Liquid Endosperm

However, the Panel also concluded that the available data are insufficient to make a determination that the following 3 ingredients are safe under the intended conditions of use in cosmetic formulations:

Cocos Nucifera (Coconut) Flower Extract
Cocos Nucifera (Coconut) Flower Nectar Extract
Cocos Nucifera (Coconut) Shell Powder

The additional data needed for these cosmetic ingredients are:

- Composition and impurities data for Cocos Nucifera (Coconut) Flower Extract, Cocos Nucifera (Coconut) Flower Nectar Extract, and Cocos Nucifera (Coconut) Shell Powder
- Data on Cocos Nucifera (Coconut) Flower Extract, Cocos Nucifera (Coconut) Flower Extract, and Cocos Nucifera (Coconut) Shell Powder on the following endpoints:
    - 28-day dermal toxicity, and if positive, developmental and reproductive toxicity may be needed
    - Genotoxicity
    - Dermal irritation and sensitization

Polysilicone-11

The Panel issued a Tentative Report for public comment with the conclusion that Polysilicone-11 is safe in the present practices of use and concentration described in the safety assessment. The safety of this ingredient was supported by sufficient data on residual monomer concentrations and dermal sensitization/irritation, and lack of clinical reports. In addition, as this ingredient is reported to have a large molecular weight, it is unlikely to penetrate the epidermis, mitigating the concern for systemic toxicity.

According to 2020 VCRP data, Polysilicone-11 is reported to be used in 440 formulations, 432 of which are leave-on formulations. Results of the concentration of use survey conducted by the Council in 2018, and updated in 2019, indicate Polysilicone-11 is used at a maximum concentration of up to 19.9% in other skin care preparations.

Insufficient Data Announcements

For these insufficient data announcements, 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 November 17, 2020, 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* ***December 7-8, 2020*** *meeting.*

Saccharide Humectants

The Panel issued an Insufficient Data Announcement (IDA) with for the following saccharide humectants that are listed below:

Anhydrogalactose	Anhydroxylitol	Psicose	Saccharide Isomerate
Anhydroglucitol	Arabinose	Saccharide Hydrolysate	

- Method of manufacture, impurities, and composition data on all ingredients/ingredient mixtures
- Confirmation of the lack of skin penetration of these ingredients/ingredient mixtures
- Composition of glucose and fructose in the ingredient mixtures; if the 2 monosaccharides are present in sufficient amounts, the available negative data on glucose and fructose skin penetration can be used to evaluate the skin penetration potential of saccharide humectant ingredient mixtures
- 28-day dermal toxicity data on Saccharide Isomerate at cosmetic use concentrations up to 2.8%

Levulinic Acid

The Panel issued an IDA for Levulinic Acid and Sodium Levulinate. The additional data needs to determine safety for these cosmetic ingredients are:

- Impurities
- 28-day dermal toxicity data (and, if found to be absorbed other endpoints may be needed, e.g. developmental and reproductive toxicity (DART))
- Ocular irritation data at, or above, the highest reported leave-on concentration, 0.57%

Ubiquinone

The Panel issued an IDA for Disodium Ubiquinone, Hydroxydecyl Ubiquinone, Ubiquinol, and Ubiquinone. The additional data needs to determine safety for these cosmetic ingredients are:

- Method of manufacture for Hydroxydecyl Ubiquinone and Ubiquinol
- Concentration of use data for Hydroxydecyl Ubiquinone

Amino Acid Diacetates

The Panel issued an IDA for Beta-Alanine Diacetic Acid and Tetrasodium Glutamate Diacetate. The additional data needed to determine safety for these cosmetic ingredients are:

- 28-day dermal toxicity on Beta-Alanine Diacetic Acid
    - If positive, DART, genotoxicity, and dermal irritation and sensitization may be needed

Silicates

The Panel issued an IDA for the following 24 silicate ingredients:

Aluminum Calcium Sodium Silicate	Magnesium Silicate
Aluminum Iron Calcium Magnesium Germanium Silicates	Magnesium Trisilicate
Aluminum Iron Calcium Magnesium Zirconium Silicates	Potassium Silicate
Aluminum Iron Silicates	Pyrophyllite
Aluminum Silicate	Sodium Magnesium Aluminum Silicate
Ammonium Silver Zinc Aluminum Silicate	Sodium Magnesium Silicate
Calcium Magnesium Silicate	Sodium Metasilicate
Calcium Silicate	Sodium Potassium Aluminum Silicate
Lithium Magnesium Silicate	Sodium Silicate
Lithium Magnesium Sodium Silicate	Sodium Silver Aluminum Silicate
Magnesium Aluminometasilicate	Zinc Silicate
Magnesium Aluminum Silicate	Zirconium Silicate

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

- Method of manufacturing, with specific focus to the origin of raw materials (synthetic versus mined derivation)
- Composition and impurities data, specifically percent quantification of any crystalline silica/silicate
- Inhalation toxicity data

Diacetone Alcohol

The Panel issued an IDA for Diacetone Alcohol. In order to determine safety for this cosmetic ingredient, the Panel requested impurities and purity level data on this ingredient, as used in cosmetics.

Red Algae
The Panel issued an IDA for the following 60 red algae ingredients:

Ahnfeltiopsis Concinna Extract	Gelidium Amansii Extract	Lithothamnion Calcareum Powder
Asparagopsis Armata Extract	Gelidium Amansii Oligosaccharides	Lithothamnion Corallioides Powder
Betaphycus Gelatinum Extract	Gelidium Cartilagineum Extract	Mesophyllum Lichenoides Extract
Botryocladia Occidentalis Extract	Gelidium Pulchrum Protein	Palmaria Palmata Extract
Calliblepharis Ciliata Extract	Gelidium Sesquipedale Extract	Palmaria Palmata Powder
Ceramium Kondoi Extract	Gigartina Skottsbergii Extract	Phymatolithon Calcareum Extract
Ceramium Rubrum Extract	Gigartina Stellata Extract	Pikea Robusta Extract
Chondracanthus Teedei Powder	Gloiopeltis Tenax Extract	Polysiphonia Lanosa Extract
Chondrus Crispus	Gloiopeltis Tenax Powder	Porphyra Linearis Powder
Chondrus Crispus Extract	Gracilaria Verrucosa Extract	Porphyra Tenera Extract
Chondrus Crispus Powder	Gracilariopsis Chorda Extract	Porphyra Tenera Sporophyte Extract
Corallina Officinalis Extract	Grateloupia Livida Powder	Porphyra Umbilicalis Extract
Corallina Officinalis Powder	Hydrolyzed Asparagopsis Armata Extract	Porphyra Umbilicalis Powder
Corallina Officinalis Thallus Extract	Hydrolyzed Chondrus Crispus Extract	Porphyra Yezoensis Extract
Cyanidium Caldarium Extract	Hydrolyzed Corallina Officinalis	Porphyra Yezoensis Powder
Delesseria Sanguinea Extract	Hydrolyzed Corallina Officinalis Extract	Porphyridium Cruentum Culture Conditioned Media
Digenea Simplex Extract	Hydrolyzed Porphyra Yezoensis	Porphyridium Cruentum Extract
Dilsea Carnosa Extract	Hypnea Musciformis Extract	Porphyridium Purpureum Extract
Furcellaria Lumbricalis Extract	Kappaphycus Alvarezzi Extract	Rhodymenia Palmata Extract
Gelidiella Acerosa Extract	Lithothamnion Calcareum Extract	Sarcodiotheca Gaudichaudii Extract

It was noted that several ingredients evaluated in this report are generally recognized as safe (GRAS) or used in foods. Since systemic exposure via ingestion would be far greater than exposure via cosmetics, the Panel deferred the need for systemic toxicity data on these ingredients, but requested the addition of dermal sensitization data where absent. For those ingredients without a GRAS designation, composition/impurities data are needed. In addition, the Panel requested a 28-day dermal toxicity assay on Corallina Officinalis Extract at the current maximum concentration of use (2%), as this ingredient is used at the highest concentration; if positive, systemic toxicity data such as DART and genotoxicity may be needed.

155th Meeting Notes

Director's Report

Dr. Heldreth expressed gratitude for the Panel's and other stakeholders' continued support of the Cosmetic Ingredient Review program.

As he mentioned in June, Dr. Heldreth noted that this meeting would be Dr. Marks' last Panel meeting, as he is retiring hereto. Dr. Marks served this Panel for 19 years, lending his great expertise, leadership, and geniality. The CIR Staff and Members of the Panel are extremely grateful to have worked with him for so long. The CIR Steering Committee met this summer, and elected an expert to fill this team leader role. Thus, starting with the December 2020 meeting, the Panel will have a new team leader, Dr. David Cohen. Dr. Cohen completed his undergraduate work at the City University of New York, and is a graduate of the State University of New York at Stony Brook, School of Medicine (M.D.) and Columbia University School of Public Health (M.P.H.). He completed his dermatology residency at the New York University Medical Center and Columbia University School of Public Health. He is currently Chief - Allergy Section/Contact Dermatitis (among other titles) at NYU. Dr. Cohen has also served on, and led, numerous professional and scientific associations and committees, including the American Contact Dermatitis Society, the International Eczema Council, the American Dermatological Association, & the American Academy of Dermatology. More information about the Panel may be found at their website: https://ingredientsafetyexpertpanel.org/

Re-Review Summaries

Quaternium-18 and Quaternium-18 Bentonite

The Panel approved the re-review summary of these ingredients, concluding that the data on Quaternium-18 and Quaternium-18 Bentonite were sufficient to re-affirm the original conclusion that these ingredients are safe as cosmetic ingredients in the present practices of use and concentration. This conclusion was originally published in 1982. In 2001, after considering new studies and updated use data on these ingredients, the Panel determined to not reopen the safety assessment. It should be noted that Quaternium-18 Hectorite was also included in the 1982 safety assessment and 2001 re-review consideration. However, Quaternium-18 Hectorite is not included in the current assessment because it was recently (2013) part of a separate assessment (Safety Assessment of Ammonium Hectorites as Used in Cosmetics).

Sulfites
The Panel approved the re-review summary of the following 7 sulfite ingredients, affirming their original conclusion that these ingredients are safe as used in cosmetic formulations.

Ammonium Bisulfite	Sodium Bisulfite
Ammonium Sulfite*	Sodium Metabisulfite
Potassium Metabisulfite	Sodium Sulfite
Potassium Sulfite	

** Not reported to be in current use. Were this ingredient not in current use to be used in the future, the expectation is that it would be used in product categories and at concentrations comparable to others in this group.*

The Panel first reviewed the safety of sulfites in 2003. The Panel considered the increased ingredient use frequency, reports of dermal sensitization, enhanced asthmatic responses to dust mites, and mutagenic effects in the published literature.

Final 2021 Priorities

The CIR Procedures require preparation of the 2021 Draft Priority List for public comment by June 1, 2020. This list was provided to the Panel and reviewed at the June 2020 meeting; comments made at the June meeting were considered and incorporated into a 2021 Draft Final Priority List, presented at the September 2020 meeting. The priority list is typically based on stakeholder requests (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 13 (in response to a Freedom of Information Act request).

While this list includes only the lead ingredients, groupings of botanical or other organism-sourced mixture-type ingredients (e.g., Rosa Centifolia Flower Extract), are drafted in the 2021 Active Priority List available at https://cir-safety.org/sites/default/files/Final_2021_Active_Priority_List.pdf . For organic chemicals, the list of lead ingredients was forwarded to the newly convened Expert Panel Grouping/Clustering Working Group for consideration; the Working Group's comments were considered and incorporated, where appropriate. These groupings are also drafted in the 2021 Active Priority List.

There are 11 reports proposed (2 of the 12 lead ingredients below are proposed to be reviewed together in 1 report) on the 2021 Final Priorities List. Reports previously prioritized and on the CIR docket at the end of 2020, as well as a number of re-reviews of previous assessments, will supplement the total number of reports to be assessed in 2021.

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
- 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, additional data needs 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.

Ingredients	Frequency of Use (FOU) Data Year 2020
For cause	
Basic Yellow 57 – a hair dye	45
Per FOU	
Yeast Extract	736
Glyceryl Acrylate/Acrylic Acid Copolymer	519
Hydroxyacetophenone	409
Glyceryl Polymethacrylate	364
Acrylates/Octylacrylamide Copolymer	361
Hydroxypropyl Starch Phosphate	353
Sodium Lauroamphoacetate	344
Zingiber Officinale (Ginger) Root Extract	326
Leuconostoc/Radish Root Ferment Filtrate	322
Rosa Centifolia Flower Extract	321
Phytosteryl/Octyldodecyl Lauroyl Glutamate	313

Scientific Literature Reviews

The following Scientific Literature Reviews are posted at 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.

- Acrylate/Acrylamide Copolymers
- Acryloyloxyethyl Phosphorylcholine Polymers
- Diatomaceous Earth
- *Equisetum arvense*-Derived Ingredients
- Fatty Esters End-Capped Alkoxylates
- Fatty Ethers
- Glycolactones
- *Hordeum vulgare*-Derived Ingredients
- *Melaleuca alternifolia* (Tea Tree)-Derived Ingredients
- *Olea europaea*-Derived Ingredients
- Polyquaternium-6
- *Portulaca oleracea*-derived Ingredients
- *Rosa damascena*-derived Ingredients
- *Saccharum officinarum*-Derived Ingredients
- *Salvia officinalis*-Derived Ingredients

Next CIR Expert Panel Meeting

Monday and Tuesday, December 7-8, 2020, to be held virtually via Microsoft Teams.
Please submit a request for an invitation prior to the meeting if you would like to attend. The link will be available approximately a month before the meeting and will be found on the 156th meeting page of the CIR website. https://www.cir-safety.org/