

# EXPERT PANEL FOR FRAGRANCE SAFETY MEETING

## Final Minutes

September 25-27, 2024

Tarrytown, New York

| EXPERT PANEL MEMBERS   | RIFM STAFF   |  | Guests  |
|--|--|--|---|
| Donald Belsito (Chair)<br>Magnus Bruze<br>Amanda Bryant-Friedrich<br>G. Allen Burton, Jr.<br>Mark Cronin<br>Maria Dagli (Vice-Chair)<br>Wolfgang Dekant<br>Allison Fryer<br>Debra Laskin<br>Trevor Penning<br>Aldert Piersma<br>Terry Schultz<br>I Glenn Sipes | Anne Marie Api<br>Adrianna Bartlett (Virtual)<br>Danielle Botelho<br>Olive Chon (Virtual)<br>Sam Crotty (Virtual)<br>Chaitra Deodhar (Virtual)<br>Marissa Guttenberg (Virtual)<br>Leah Jones<br>Kaushal Joshi (9/26) | Maura Lavelle (Virtual)<br>Isabelle Lee (9/26-27)<br>Holger Moustakas<br>Jake Muldoon<br>Gretchen Ritacco (9/25-26)<br>Faiz Siddiqi (9/25)<br>Gary Sullivan (9/25)<br>Yax Thakkar (9/27) | Tobey Marzouk (9/26)<br>Robert Weinstein (9/26) |

### 1) Discussion of the Meeting Schedule and Agenda Topics

- a) Completion/Signing of the Conflict-of-Interest Statement

Dr. Belsito opened the meeting. The Conflict-of-Interest Statement was signed.

### 2) Minutes

The minutes from the May 2024 meeting were approved with no changes.

### 3) Follow-Up and Informational Items

- a) Follow-Up List

Dr. Api went through the follow-up list and provided updates on items and general comments where applicable.

### 4) Standing Items (For Expert Panel information only; per Panel's request)

- a) RIFM Publications

The Panel reviewed the RIFM publication list. This is a standing item on the agenda, which provides a summary of all RIFM's recent publications.

- b) RIFM Safety Assessment Publications

The Panel reviewed the RIFM safety assessment publications list. This list is an ongoing list of all the published safety assessments.

## **5) RIFM Communication**

### **a) Presentation - Update on RIFM**

Dr. Api provided an overview of RIFM activities (see Attachment 1).

### **b) Presentation by Editing/Communications Team on Communications Update**

Mr. Sullivan and Siddiqi and Ms. Chon provided an update on the RIFM communication plans, safety assessment publications, and the Fragrance Resource Center website (see Attachment 2).

### **c) Communicating risk and safety**

Dr. Api provided an update on RIFM activities to communicate risk and safety.

## **6) Panel Governance and Procedures**

### **a) Review Panel's Conflict of Interest Policy**

Mr. Marzouk reviewed the Panel's Conflict of Interest Policy, and a discussion was held regarding specific issues that might arise. All Panel Members were satisfied with and made no changes to the Conflict of Interest Policy.

### **b) Review Panel's Operating Procedures and approve proposed amendments**

Mr. Marzouk reviewed the Panel's Operating Procedures with the Panel. Some modifications were made. Mr. Marzouk will make the changes, and the updated policy will be placed on the Expert Panel's website.

### **c) Review and approve proposed amendments to the Transparency Policy**

Mr. Marzouk reviewed the Panel's Transparency Policy with the Panel. A few modifications were made. Mr. Marzouk will make the changes, and the updated policy will be placed on the Expert Panel's website.

### **d) Review and approve the proposed Policy regarding Adjunct Teams**

Mr. Marzouk reviewed the proposed policy regarding Adjunct Teams with the Panel. After a few modifications, the Panel approved the Policy. Mr. Marzouk will make the changes and the updated policy, and all the Adjunct Group Members will be placed on the Expert Panel's website.

### **e) Review the purpose, scope, and timetable of the Expert Panel Self-Assessment Survey**

Mr. Marzouk discussed the Expert Panel Self-Assessment Survey's purpose, scope, and timetable. The survey will be issued within the next several weeks and the results will be reviewed at the next Panel meeting.

### **f) Revisit the Panel's Vision and Mission Statement**

The Panel Members reviewed and were satisfied with the Vision and Mission Statement. No changes were made.

## **7) Presentation by Dr. Bob Weinstein**

Dr. Weinstein joined the Panel for a one-hour presentation. To facilitate communications once a year RIFM's Chair (or his/her designee) updates the Expert Panel as to relevant activities and initiatives undertaken by RIFM.

## **8) RIFM Safety Evaluation Process**

### **a) Presentation RIFM by D. Botelho Safety Assessment Update and Metrics**

Dr. Botelho gave a presentation on the progress of the safety assessment program including the safety assessment update and metrics on naturals (see Attachment 3).

## b) Presentation by L. Jones on Safety Assessment Process Update

Ms. Jones provided an update on the internal process used in generating safety Assessments (see Attachment 4).

### c) Safety Assessment Overview

- i) (24 Total Safety Assessments including 29 Total materials)

## b) General Comments

The NCS Criteria Document states that if a natural has an unknown portion, a minimum of 80% of the total composition (including the unknown portion) must be identified. RIFM will continue to monitor this.

- i) NCS statement 80% min, known composition based on the process that there is an unknown composition. The composition is based on the volatile portion only. The remaining is the non-volatile portion.

## 7) Reproduction Toxicity

### a) Presentation by K. Joshi, A. Bartlett, F. Siddiqi - Update on RIFM summary of all reproduction/fertility data - Thursday, September 26

Drs. Joshi and Bartlett and Mr. Siddiqi gave a presentation updating the Panel on the RIFM summary of all reproductive/fertility data (see Attachment 5).

## 8) Naphtho[2,1-b] furan, dodecahydro-3a,6,6,9a-tetramethyl-, (3aR,5aS,9aS,9bR)-; CAS 6790-58-5; Update to Safety Assessment

The Panel reviewed a cluster of materials:

| RIFM ID | CAS NO.     | Material Name  |
|---------|-------------|--|
| 1169    | 6790-58-5   | Naphtho[2,1-b]furan, dodecahydro-3a,6,6,9a-tetramethyl-, (3aR,5aS,9aS,9bR)-                      |
| 5010    | 3738-00-9   | Naphtho[2,1-b]furan, dodecahydro-3a,6,6,9a-tetramethyl-  |
| 6490    | 338735-71-0 | 8H-Indeno(4,5-B)furan,2,3,3a,4,5,5a,6,7,8a,9-decahydro-2,6,6,7,8,8-hexamethyl Mixture of isomers |
| 6493    | 647828-16-8 | Indeno[4,3a-b]furan,decahydro-2,2,7,7,8,9,9-heptamethyl-   |
| 6975    | 476332-65-7 | 2H-Indeno[4,5b] furan, decahydro-2,2,6,6,7,8,8-heptamethyl                                       |

The Panel decided that three materials (CAS Nos. 6790-58-5, 3738-00-9, 338735-71-0) should remain in one cluster and are not sensitizers based on all the data.

The last two materials with CAS Nos. 647828-16-8 and 476332-65-7 are a mixture and should be separated from the cluster. All suppliers should be contacted and should submit a detailed certificate of analysis.

## 9) NCS Safety Assessments

- i) Total NCS Safety Assessments: 6

| Material ID | RIFM ID      | Material Name            | Tab    | Status                |
|-------------|--------------|--------------------------|--------|-----------------------|
| 1048378     | 6614-F2.1    | Ylang ylang absolute     | Tab 28 | Approved with changes |
| 1045422     | 6614-F2.12   | Ylang ylang oil Complete | Tab 29 | Approved with changes |
| 1047239     | 6614-F2.12X  | Ylang ylang oil extra    | Tab 30 | Approved with changes |
| 1045628     | 6614-F2.12.1 | Ylang ylang oil I        | Tab 31 | Approved with changes |
| 1042866     | 6614-F2.12.2 | Ylang ylang oil II       | Tab 32 | Approved with changes |
| 1044828     | 6614-F2.12.3 | Ylang ylang oil III      | Tab 33 | Approved with changes |

**10) Review Safety Assessments Batch 1**

| CAS#                     | Material Name  | Tab    | Status  |
|--------------------------|--|--------|---|
| 13431-57-7               | 1,3-Propanediol, 2,2-dimethyl-, 1,3-diacetate                                  | Tab 34 | Approved  |
| 16510-27-3               | 1-Cyclopropylmethyl-4-methoxybenzene   | Tab 35 | Approved  |
| 38462-23-6               | 4-(4,8-Dimethylnona-3,7-dienyl)pyridine  | Tab 36 | Approved  |
| 1003-04-9                | 4,5-Dihydro-3(2H)thiophenone   | Tab 37 | Approved with changes   |
| 61315-75-1               | 4-(4-Methyl-3-penten-1-yl)-2(5H)-furanone;<br>$\alpha,\beta$ -Acariolide       | Tab 38 | Approved  |
| 101-94-0                 | p-Tolyl phenylacetate  | Tab 39 | Approved  |
| 68039-69-0               | 1-Cyclohexylethyl 2-butenate   | Tab 40 | Insufficient Data – human skin<br>CNIH                                |
| 68039-73-6               | [1,1'-Bicyclopentyl]-2-yl 2-butenate   | Tab 41 | Insufficient data – human skin<br>CNIH<br>(read across to 68039-69-0) |
| 79-68-5                  | 3-Buten-2-one, 4-(2,2,3-trimethyl-6-<br>methylenecyclohexyl)-; $\gamma$ -Irone | Tab 42 | Approved  |
| 2497-18-9;<br>10094-40-3 | trans-2-Hexenyl acetate  | Tab 43 | Approved  |

## 11) Review Safety Assessments Batch 2

| CAS#  | Material Name   | Tab    | Status                |
|---|---|--------|-----------------------|
| 22030-19-9  | beta-Ionyl acetate  | Tab 44 | Approved              |
| 111-27-3  | Hexyl alcohol   | Tab 45 | Approved with changes |
| 111-70-6  | Heptyl alcohol  | Tab 46 | Approved with changes |
| 111-87-5  | 1-Octanol   | Tab 47 | Approved              |
| 143-08-8  | Nonyl alcohol   | Tab 48 | Approved              |
| 112-30-1  | 1-Decanol   | Tab 49 | Approved              |
| 112-42-5  | Undecyl alcohol   | Tab 50 | Approved              |
| 112-53-8  | Lauryl alcohol  | Tab 51 | Approved              |
| 112-70-9  | 1-tridecanol;tridecan-1-ol;tridecaol                      | Tab 52 | Approved              |
| 3407-42-9;<br>70955-71-4;<br>66068-84-6;<br>68877-29-2;<br>66072-32-0 | 3-(5,5,6-Trimethylbicyclo[2.2.1]hept-2-yl)cyclohexan-1-ol | Tab 53 | Approved with changes |
| 579-93-1  | N-Benzoylanthranilic acid                                 | Tab 54 | Approved with changes |
| 4166-20-5   | 4-Acetoxy-2,5-dimethyl-3(2H)furanone                      | Tab 55 | Approved              |
| 95-65-8   | 3,4-Xylenol   | Tab 56 | Approved              |
| 576-26-1  | 2,6-Xylenol   | Tab 57 | Approved              |

## 12) Review Safety Assessments Maintenance Batch

| CAS#  | Material Name   | Tab    | Status                |
|---|---|--------|-----------------------|
| 51519-65-4  | 4,4a,6,7,8,8a-Hexahydro-1,4-methanonaphthalen-5(1H)-one       | Tab 59 | Approved              |
| 7779-23-9   | Linalyl hexanoate   | Tab 60 | Approved              |
| 95-16-9   | Benzothiazole   | Tab 61 | Approved              |
| 105-68-0  | Isoamyl propionate  | Tab 62 | Approved with changes |
| 110-45-2  | Isoamyl formate   | Tab 63 | Approved with changes |
| 123-92-2  | Isoamyl acetate   | Tab 64 | Approved with changes |
| 540-42-1  | Isobutyl propionate   | Tab 65 | Approved with changes |
| 55590-83-5  | Pentanoic acid, 2-methylbutyl ester                           | Tab 66 | Approved              |
| 59052-82-3  | Cyclododecyl formate  | Tab 67 | Approved with changes |
| 27939-60-2;<br>36635-35-5;<br>68039-49-6;<br>68737-61-1;<br>67801-65-4;<br>68039-48-5;<br>68084-52-6;<br>35145-02-9 | Dimethylcyclohex-3-ene-1-carbaldehyde<br>(isomer unspecified) | Tab 68 | Approved with changes |

## 13) RIFM Research Projects

### a) Overview of research programs

Dr. Api reported that an orientation for new Panel members to the RIFM safety assessment process as well as the RIFM Research Program was conducted prior to the September Panel meeting.

### b) Epidemiology

Prof Bruze reported that EDEN is planning to submit another paper; no meetings are planned for the remaining part of this year. As part of IDEA an extended surveillance study is planned; a patch test course was held recently.

### c) Presentation by Holger Moustakas and Jake Muldoon – Chemistry Research Update

Drs. Moustakas and Muldoon gave a presentation on the chemistry research projects (see Attachment 6).

### d) Presentation by Isabelle Lee, Izzy Schember, Maura Lavelle, and Marissa Guttenberg - Skin Sensitization Research

Dr. Lee updated the Panel on the numerous research projects underway on skin sensitization (see Attachment 7).

### e) Presentation by Gretchen Ritacco and Chaitra Deodhar - Phototoxicity Research

Ms. Ritacco and Dr. Deodhar gave presentations (see Attachments 8 and 9, respectively) summarizing the research projects investigating alternative methods to predict photoallergy.

### f) Presentation by Yax Thakkar, Holger Moustakas, and Kayla Farrell on Genotoxicity Research

Drs. Thakkar, Moustakas, and Farrell gave a presentation (see Attachment 10) summarizing the genotoxicity research projects.

**g) Presentation by Kaushal Joshi and Arianna Bartlett on Repeat Dose and Reproduction Toxicity**

Dr. Joshi gave a presentation on the repeat dose and reproduction toxicity research projects (see Attachment 11).

**14) New Expert Panel Members**

The Panel thanked Dr. Terry Schultz for his expertise and 11 years he has served on the Expert Panel for Fragrance Safety. Dr. Schultz will retire from the Panel at the end of 2024. Dr. Glenn Sipes plans to retire from the Panel in 2025.

**15) Panel Executive Session**

The Expert Panel held an Executive Session.

**19) Future Meeting Dates**

|                      |  |                      |
|----------------------|--|----------------------|
| a) Monday-Wednesday, | January 27-29, 2025                    | Puerto Rico          |
| b) Tuesday-Thursday, | June 3-5, 2025                         | Tarrytown, NY        |
|                      | RIFM INFOX®, September 29, 2025, Paris |                      |
| c) Wednesday-Friday, | October 1-3, 2025                      | Cannes/Grasse France |
| d) Monday-Wednesday, | January 26-28, 2026                    | TBD                  |
| e) Monday-Wednesday, | May 18-20, 2026                        | NYC                  |
| f) Monday-Wednesday  | September 21-23, 2026                  | Dublin               |

Respectfully submitted,



Anne Marie Api, Ph.D., Fellow ATS

President

|                |   |
|----------------|---|
| Attachment 1:  | Presentation: Dr. Anne Marie Api  |
| Attachment 2:  | Presentation: Mr. Gary Sullivan, Mr. Faiz Siddiq, Ms. Oliv Chon                             |
| Attachment 3:  | Presentation: Dr. Danielle Botelho  |
| Attachment 4:  | Presentation: Ms. Leah Jones  |
| Attachment 5:  | Presentation: Drs. Kaushal Joshi and Arianna Bartlett and Mr. Faiz Siddiqi                  |
| Attachment 6:  | Presentation: Drs. Holger Moustakas and Jake Muldoon  |
| Attachment 7:  | Presentation: Dr. Isabelle Lee, Isabella Schember, Marissa Guttenberg and Ms. Maura Lavelle |
| Attachment 8:  | Presentation: Ms. Gretchen Ritacco  |
| Attachment 9:  | Presentation: Dr. Chaitra Deodhar   |
| Attachment 10: | Presentation: Drs. Yax Thakkar, Holger Moustakas and Kayla Farrell                          |
| Attachment 11: | Presentation: Drs. Kaushal Joshi and Arianna Bartlett                                       |