

EXPERT PANEL FOR FRAGRANCE SAFETY MEETING

DRAFT AGENDA

Jan. 22-24, 2018

Miami, FL

Start 9:00 AM

- 1) Discussion of the Meeting Schedule and Agenda Topics** DVB
 - a) Completion/Signing of Conflict of Interest Statement AMA

- 2) Minutes (Tab 01) (Tab 02) (Tab 03) (Tab 04) (Tab 05) (Tab 06) (Tab 07) (Tab 08) (Tab 09) (Tab 10) (Tab 11) (Tab 12)** AMA

- 3) Follow-Up and Informational Items**
 - a) Follow-Up List (Tab 13) AMA

- 4) Standing Items (For Expert Panel information only; per Panel's request)**
 - a) RIFM Publications (Tab 14) AMA

- 5) Presentation and Demonstration of Summary Table** SLC
 - a) Safety Assessment Overview (152 Safety Assessments covering 202 materials) (Tab 15)
 - b) General Comments
 - i) Review spreadsheets SLC

- 6) Review Safety Assessments Batch 1**

| CAS# | Material Name | Tab |
|--|--|--------|
| 3452-97-9 | 3,5,5-Trimethyl-1-hexanol | Tab 16 |
| 5986-38-9 | Ocimenol | Tab 17 |
| 103614-86-4 | 1-Naphthalenol, 1,2,3,4,4a,5,8,8a-octahydro-2,2,6,8-tetramethyl- | Tab 18 |
| 28462-85-3 | endo-1,2,3,3-Tetramethylbicyclo[2.2.1]heptan-2-ol | Tab 19 |
| 41199-19-3, 71832-76-3, 643-53-8 and 670-24-6 | 1,2,3,4,4a,5,6,7-Octahydro-2,5,5-trimethyl-2-naphthalenol | Tab 20 |
| 83926-73-2 | 4-Cyclohexyl-2-methyl-2-butanol | Tab 21 |
| 26160-83-8, 26896-48-0 | Bis(hydroxymethyl)tricyclo[5.2.1.0 ^{2,6}]decane | Tab 22 |
| 16491-36-4 | cis-3-Hexenyl butyrate | Tab 23 |
| 33467-73-1 and 56922-80-6 | cis-3-Hexenyl formate | Tab 24 |

| CAS# | Material Name | Tab |
|--|---|---------------|
| 1708-82-3 , 3681-82-1 and 3681-71-8 | Hex-3-enyl acetate | Tab 25 |
| 33467-74-2 | cis-3-Hexenyl propionate | Tab 26 |
| 31501-11-8 | cis-3-Hexenyl hexanoate | Tab 27 |
| 76238-22-7 | (Z)-Non-6-enyl acetate | Tab 28 |
| 41519-23-7 | cis-3-Hexenyl isobutyrate | Tab 29 |
| 10094-41-4 and 53398-85-9 | (Z)-Hex-3-enyl 2-methylbutyrate | Tab 30 |
| 68555-65-7 and 67674-47-9 | (E,Z)-2,6-Nonadien-1-ol acetate | Tab 31 |
| 91482-37-0 , 3239-35-8, 3239-37-0 | (E)-6,10-Dimethylundeca-5,9-dien-2-yl acetate | Tab 32 |
| 106-29-6 and 999-40-6 | Geranyl butyrate | Tab 33 |
| 105-86-2 and 2142-94-1 | Geranyl Formate | Tab 34 |
| 105-90-8 and 105-91-9 | Geranyl propionate | Tab 35 |
| 29548-30-9 | Farnesyl acetate | Tab 36 |
| 105-87-3 and 141-12-8 | Geranyl acetate | Tab 37 |
| 50816-18-7 | 9-Decenyl acetate | Tab 38 |
| 68141-27-5 | 10-Undecenoic acid, heptyl ester | Tab 39 |
| 80118-06-5 | 1,3-Dimethylbut-3-enyl isobutyrate | Tab 40 |
| 68844-96-2 | 1,3-Benzodioxole-5-propanol, alpha-methyl-, 5-acetate | Tab 41 |
| 120-45-6 | alpha-Methylbenzyl propionate | Tab 42 |
| 7775-39-5 | alpha-Methylbenzyl isobutyrate | Tab 43 |
| 629-33-4 | Hexyl formate | Tab 44 |
| 142-92-7 | Hexyl acetate | Tab 45 |
| 2445-76-3 | Hexyl propionate | Tab 46 |
| 2639-63-6 | butanoic acid | Tab 47 |
| 112-06-1 | Heptyl acetate | Tab 48 |
| 112-32-3 | Octyl formate | Tab 49 |
| 112-14-1 | Octyl acetate | Tab 50 |
| 110-39-4 | Octyl butyrate | Tab 51 |
| 143-13-5 | Nonyl acetate | Tab 52 |
| 112-17-4 | Decyl acetate | Tab 53 |
| 112-66-3 | Lauryl acetate | Tab 54 |
| 10250-45-0 | 4-Heptanol, 2,6-dimethyl-,acetate | Tab 55 |
| 4864-61-3 | 3-Octyl acetate | Tab 56 |
| 142-09-6 | Hexyl methacrylate | Tab 57 |
| 61931-81-5 | cis-3-Hexenyl lactate | Tab 58 |
| 20962-70-3 | 4-Pentenoic acid, 2-acetyl-4-methyl-, ethyl ester | Tab 59 |
| 64001-15-6 | Tricyclodecanyl acetate | Tab 60 |
| 72183-75-6 | 1-Methyl-2-(1-methylpropyl)cyclohexyl acetate | Tab 61 |
| 42288-75-5 | Cyclohexyl phenylacetate | Tab 62 |

| CAS# | Material Name | Tab |
|---|--|--------|
| 122760-84-3 | Tricyclo[3.3.1.1.(3.7)]decan-2-ol, 4-methyl-8-methylene- | Tab 63 |
| 63500-71-0 , 65418-69-1 (cis), 65418-70-4 (trans) | 2-Isobutyl-4-methyltetrahydro-2H-pyran-4-ol | Tab 64 |
| 8007-35-0 , 80-26-2 and 7785-54-8 | Terpinyl acetate (Isomer mixture) | Tab 65 |
| 58985-18-5 and 80-25-1 | Dihydroterpinyl acetate | Tab 66 |
| 80-27-3 | Terpinyl propionate | Tab 67 |
| 2153-28-8 | Terpinyl butyrate | Tab 68 |
| 2153-26-6 | Terpinyl formate | Tab 69 |
| 7774-65-4 | Terpinyl isobutyrate | Tab 70 |

7) RIFM Safety Evaluation Process

- a) Presentation RIFM Safety Assessment Update and Metrics JM
- b) Presentation on Low Exposure Materials AMA

8) Introduction to Safety Assessment approach to Naturals Complex Substances (webinar) (Tab 71)

9) Review Safety Assessments Batch 2

| CAS# | Material Name | Tab |
|-----------------------------------|--|--------|
| 87731-18-8 , 84681-92-5 | Cyclooct-4-en-1-yl methyl carbonate | Tab 72 |
| 105-53-3 | Diethyl malonate | Tab 73 |
| 10031-87-5 | 2-Ethylbutyl acetate | Tab 74 |
| 103-09-3 | 2-Ethylhexyl acetate | Tab 75 |
| 90397-38-9 | 2-Methylpentyl 2-methylvalerate | Tab 76 |
| 134-28-1 | Guaiyl acetate | Tab 77 |
| 67674-46-8 | 6,6-Dimethoxy-2,5,5-trimethylhex-2-ene | Tab 78 |
| 97358-54-8 , 97358-55-9 | (E)-1-(1-Methoxypropoxy)hex-3-ene | Tab 79 |
| 28069-74-1 | Acetaldehyde ethyl cis-3-hexenyl acetal | Tab 80 |
| 63449-64-9 | (Z,Z)-1,1'-[Ethylidenebis(oxy)]di(hex-3-ene) | Tab 81 |
| 589-38-8 | 3-Hexanone | Tab 82 |
| 123-19-3 | 4-Heptanone | Tab 83 |
| 110-43-0 | 2-Heptanone | Tab 84 |
| 106-35-4 | 3-Heptanone | Tab 85 |
| 111-13-7 | 2-Octanone | Tab 86 |
| 106-68-3 | 3-Octanone | Tab 87 |
| 112-12-9 | 2-Undecanone | Tab 88 |

| CAS# | Material Name | Tab |
|---|--|---------|
| 593-08-8 | 2-Tridecanone | Tab 89 |
| 2345-28-0 | 2-Pentadecanone | Tab 90 |
| 564-94-3 | 2-Formyl-6,6-dimethylbicyclo(3.1.1)hept-2-ene | Tab 91 |
| 30772-79-3 | Octahydro-4,7-methano-1H-indenecarbaldehyde | Tab 92 |
| 123-05-7 | 2-Ethylhexanal | Tab 93 |
| 7786-29-0 | 2-Methyloctanal | Tab 94 |
| 5435-64-3 | 3,5,5-Trimethylhexanal | Tab 95 |
| 19009-56-4 | 2-Methyldecanal | Tab 96 |
| 110-41-8 | 2-Methylundecanal | Tab 97 |
| 68141-14-0 | Nonanal, 5-ethyl-2-methyl- | Tab 98 |
| 107-75-5 | Hydroxycitronellal | Tab 99 |
| 62439-41-2 | 6-Methoxy-2,6-dimethylheptan-1-al | Tab 100 |
| 3613-30-7 | Methoxycitronellal | Tab 101 |
| 1128-08-1 | 3-Methyl-2-(n-pentanyl)-2-cyclopenten-1-one | Tab 102 |
| 488-10-8 and 6261-18-3 | cis-Jasmone | Tab 103 |
| 11050-62-7 | Isojasmone | Tab 104 |
| 95962-14-4 | 2-(p-Menth-1-ene-10-yl)cyclopentanone | Tab 105 |
| 68845-36-3, 17369-60-7, 39121-42-1, 39121-44-3 | 2-Cyclohexen-1-one, 3,5-diethyl-5,6-dimethyl- | Tab 106 |
| 89-81-6, 4573- 50-6, 6091-50- 5 | Piperitone | Tab 107 |
| 16429-07-5 | 2-Hexylidenecyclohexan-1-one | Tab 108 |
| 84642-57-9 | 2-[(3,3,5-Trimethylcyclohexyl)acetyl]cyclopentan-1-one | Tab 109 |
| 13380-94-4 | Tricyclo[5.2.1.0 ^{2,6}]decan-8-one | Tab 110 |
| 41724-19-0 | Octahydro-7-methyl-1,4-methanonaphtalen-6(2H)-one | Tab 111 |
| 51519-65-4 | 4,4a,6,7,8,8a-Hexahydro-1,4-methanonaphthalen-5(1H)-one | Tab 112 |
| 22690-27-3 | 1,2,3,4,5,6,7,8,9,10-Decahydro-5,9-methanobenzocycloocten-11-one | Tab 113 |
| 65405-72-3 | 1,2,3,4,4a,7,8,8a-Octahydro-2,4a,5,8a-tetramethyl-1-naphthyl formate | Tab 114 |
| 5413-60-5, 54830-99-8, 2500-83-6 | Acetoxidydrodicyclopentadiene (Mixture of Isomers) | Tab 115 |
| 17511-60-3, 68912-13-0, 67634-24-6 | Tricyclodecenyl propionate | Tab 116 |
| 113889-23-9 | Butanoic acid, 3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-indenyl ester | Tab 117 |
| 67634-20-2, 68039-39-4 | 3a,4,5,6,7,7a-Hexahydro-4,7-methano-1H-inden-5-yl isobutyrate | Tab 118 |

| CAS# | Material Name | Tab |
|--|---|---------|
| 68039-45-2, 68039-44-1 | 3a,4,5,6,7,7a-Hexahydro-4,7-methano-1H-inden-6-yl pivalate | Tab 119 |
| 58096-47-2 | 3a,7-Methano-3aH-cyclopentacycloocten-3-ol, decahydro-1,1,7-trimethyl-, formate | Tab 120 |
| 20009-20-5 | Cyclohexanemethanol, 4-(acetyloxy)-a,a,4-trimethyl-, acetate | Tab 121 |
| 72903-27-6 | Diethyl 1,4-cyclohexane dicarboxylate | Tab 122 |
| 58567-11-6 | Formaldehyde cyclododecyl ethyl acetal | Tab 123 |
| 338735-71-0, 35143-77-6 (mixture) | 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 | Tab 124 |
| 476332-65-7, 647828-16-8 (mixture) | 2H-Indeno[4,5b] furan, decahydro-2,2,6,6,7,8,8-heptomethyl and Indeno[4,3a-b]furan,decahydro-2,2,7,7,8,9,9-heptomethyl- | Tab 125 |
| 6790-58-5, 3738-00-9 | Naphtho[2,1-b]furan, dodecahydro-3a,6,6,9a-tetramethyl-, (3aR,5aS,9aS,9bR)- | Tab 126 |
| 7158-25-0 | 3a,4,4a,5,8,8a,9,9a-Octahydro-4,9:5,8-dimethano-1H-benz[f]indene | Tab 127 |
| 4630-07-3 | Valencene | Tab 128 |
| 87-44-5 | β -Caryophyllene | Tab 129 |
| 673-84-7, 3016-19-1 (mixture) | 2,6-Dimethylocta-2,4,6-triene | Tab 130 |

10) Presentation on Chemical Grouping and Read Across by M. Date

11) Presentation by A. Lapczynski – Update on Environmental Research Projects

12) Legal review

TM

- Insurance Coverage for Expert Panel
- Expert Panel Communications Policy (Tab 131)
- Interaction between Expert Panel and RIFM Board of Directors: What Level is Appropriate and Desirable?
- Legal Issues in the Workplace
- Review of Conflict of Interest Policy (General Discussion, Responses to Questions Raised by Panel)
- Status and Timing of Expert Panel Self-Assessment Survey
- Status and Timing of Independent Audit of Expert Panel's Compliance with its Policies and Procedures
- Miscellaneous Issues (Q and A with Panel)

13) Update on QRA2 Implementation

- A.M Api Presentation on QRA2

AMA

14) Review Safety Assessments – Batch 3

| CAS# | Material Name | Tab |
|--|---|---------|
| 94134-03-9 | cis-3-Octenyl propionate | Tab 132 |
| 94201-19-1 and 91069-37-3 | 1-Oxaspiro[4.5]decan-2-one, 8-methyl- | Tab 133 |
| 91069-40-8 | 1-Oxaspiro[4.5]decan-2-one, 8-ethyl-, trans- | Tab 134 |
| 4625-90-5 | 1-Oxaspiro[4.5]decan-2-one, 8-(1-methylethyl)-, trans- | Tab 135 |
| 6051-03-2 | Hexahydro-3H-benzofuran-2-one | Tab 136 |
| 54491-17-7 | 3-Ethylhexahydro-2(3H)-benzofuranone | Tab 137 |
| 90530-04-4 | 2-Propanol, reaction products with boron trifluoride and 5-ethylidenebicyclo[2.2.1]hept-2-ene | Tab 138 |
| 84434-18-4 | N,2-Dimethyl-N-phenylbutyramide | Tab 139 |
| 406488-30-0 | Butanamide, 2-ethyl-N-methyl-N-(3-methylphenyl)- | Tab 140 |
| 68228-09-1 | Ethyl 2-[[[2,4(or3,5)-dimethyl-3-cyclohexen-1-yl]methyl]amino]benzoate | Tab 141 |
| 1129-62-0 | 2-Butanone, phenylhydrazone | Tab 142 |
| 95-16-9 | Benzothiazole | Tab 143 |
| 103-84-4 | Acetanilide | Tab 144 |
| 1188-02-9 | 2-Methylheptanoic acid | Tab 145 |
| 1561-11-1 | Hexanoic acid, 4-methyl- | Tab 146 |
| 16493-80-4 | 4-Ethyl octanoic acid | Tab 147 |
| 45019-28-1 | 4-Methylnonanoic acid | Tab 148 |
| 4536-23-6 | 2-Methylhexanoic acid | Tab 149 |
| 54947-74-9 | 4-Methyloctanoic acid | Tab 150 |
| 97-61-0 | 2-Methylvaleric acid | Tab 151 |
| 565-62-8 | 3-Methylpent-3-en-2-one | Tab 152 |
| 81786-75-6 , 81786-73-4, 86115-11-9, 81786-74-5 mixture | (Z)-3,4,5,6,6-Pentamethylhept-3-en-2-one | Tab 153 |
| 54815-13-3 | Nonane, 1,1-diethoxy- | Tab 154 |
| 142653-61-0 | 3-(cis-3-Hexenyloxy)propanenitrile | Tab 155 |
| 6789-80-6 , 4440- 65-7 and 69112- 21-6 | 3-Hexenal | Tab 156 |
| 6728-31-0 | 4-Heptenal | Tab 157 |
| 2277-19-2 | cis-6-Nonenal | Tab 158 |
| 65405-70-1 , 21662-09-9 and 30390-50-2 | cis-4-Decen-1-al | Tab 159 |
| 58296-81-4 | 8-Undecenal | Tab 160 |
| 143-14-6 | 9-Undecenal | Tab 161 |
| 21944-98-9 and 30390-51-3 | (Z)-4-Dodecenal | Tab 162 |
| 4501-58-0 | 2,2,3-Trimethyl-3-Cyclopentene-1-acetaldehyde | Tab 163 |
| 67845-46-9 | (4-Methylphenoxy)acetaldehyde | Tab 164 |
| 81782-89-0 | 2,4,4,7-Tetramethylnona-6,8-dien-3-one | Tab 165 |
| 502847-01-0 | Spiro[5.5]undec-8-en-1-one, 2,2,7,9-tetramethyl- | Tab 166 |
| 42370-07-0 | 1-(3,3-Dimethylbicyclo[2.2.1]hept-2-yl)ethane-1-one | Tab 167 |

| CAS# | Material Name | Tab |
|-------------------------------|--|---------|
| 144020-22-4 and 28371-99-5 | Methyl 2,6,10-trimethylcyclododeca-2,5,9-trien-1-yl ketone | Tab 168 |
| 615-13-4 | 2H-Inden-2-one, 1,3-dihydro- | Tab 169 |
| 131812-67-4, 131812-52-7 | 2,4-Dimethyl-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)-1,3-dioxolane | Tab 170 |

15) Human Health Research Projects

- a) Epidemiology
 - i) Validation of Clinical Relevance Algorithm MB
- b) Elicitation Threshold Study on Eugenol **(Tab 171) (Tab 172) (Tab 173)** AMA
- c) **Presentation by R. Parakhia – In vitro Dermal Sensitization Research Project Update (webinar)**

16) Presentation by D. Botelho – Respiratory Research Projects

17) Presentation RIFM TTC Research Update by D. Botelho and A. Patel (webinar)

18) Expert Panel Executive Session

19) IFRA Standards

- a) Furfural – BMD developed; identify NOAEL **(Tab 174) (Tab 175) (Tab 176)**

20) Future Meeting Dates

- Monday – Wednesday May 21-23, 2018 New Jersey
- Monday – Wednesday Aug. 27-29, 2018 Stockholm
- Monday – Wednesday Jan. 28-30, 2019 Miami, FL
- Monday – Wednesday May 20-22, 2019 Rome
- Monday – Wednesday Sept. 23-25, 2019 New Jersey