

# OMUFA: Fragrance Industry Perspective

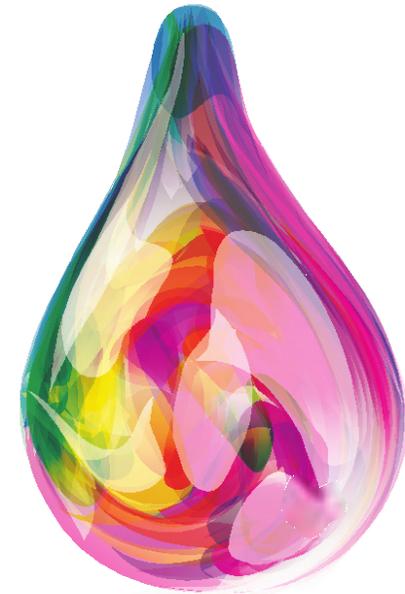
September 28, 2023



FRAGRANCE CREATORS  
ASSOCIATION®

# Fragrance Creators Association

- Trade association representing majority of fragrance manufacturing in North America
- Diverse membership of 60+ companies
- Full value chain
- Proactively and reactively manage matters related to legislative, regulatory, retailer, consumer, and other stakeholders like NGOs
- Membership also relies upon Research Institute for Fragrance Materials (RIFM)



FRAGRANCE CREATORS  
ASSOCIATION®

# Role of Fragrance as Excipient in OTC Drugs

- Enhance smell
- Mask malodor
- Palatability/appeal to consumers



# Fragrance Creators' Stance on OMUFA

- Value safety and innovation
- Appreciate OMUFA's flexibility
- Support collection of fees for OTC monograph activities
  - Believe in discretion as to where funds are allocated



# A More Efficient OMFDA

- Identify industries with a strong safety record
  - Take advantage of existing safety information/expertise
- Use FDA resources where gaps exist



# Fragrance Industry: History of Safety

- Established in 1966
- Member-funded non-profit
- Diverse 60+ members
- Staffed by experts in human health and environmental toxicological endpoints



**RIFM**<sup>®</sup>  
RESEARCH INSTITUTE FOR  
FRAGRANCE MATERIALS

# Fragrance Industry: History of Safety

- Maintain a continuously updated [database of safety data](#)
- Generate exposure data using Creme-RIFM Aggregate Exposure Model
- Conduct detailed safety assessments that are peer reviewed and published
- All publications are open-access and available on the [Fragrance Material Resource Center](#)
- Research innovative new approach methodologies (NAMs)



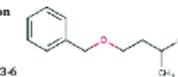
Short Review

RIFM fragrance ingredient safety assessment, benzyl isoamyl ether, CAS Registry Number 122-73-6

A.M. Api<sup>a</sup>, D. Belsito<sup>b</sup>, D. Botelho<sup>c</sup>, M. Bruze<sup>d</sup>, G.A. Burton Jr.<sup>e</sup>, J. Buschmann<sup>f</sup>, M.L. Dagli<sup>g</sup>, M. Date<sup>h</sup>, W. Dekant<sup>i</sup>, C. Deodhar<sup>j</sup>, M. Francis<sup>k</sup>, A.D. Fryer<sup>l</sup>, L. Jones<sup>m</sup>, K. Joshi<sup>n</sup>, S. La Cava<sup>o</sup>, A. Lapczynski<sup>p</sup>, D.C. Liebler<sup>q</sup>, D. O'Brien<sup>r</sup>, A. Patel<sup>s</sup>, T.M. Penning<sup>t</sup>, G. Ritacco<sup>u</sup>, J. Romine<sup>v</sup>, N. Sadekar<sup>w</sup>, D. Salvito<sup>x</sup>, T.W. Schultz<sup>y</sup>, I.G. Sipes<sup>z</sup>, G. Sullivan<sup>aa</sup>, Y. Thakkar<sup>ab</sup>, Y. Tokura<sup>ac</sup>, S. Tsang<sup>ad</sup>

<sup>a</sup> Research Institute for Fragrance Materials, Inc., 50 Tice Boulevard, Montclair, NJ, 07042, USA  
<sup>b</sup> Member RIFM Expert Panel, Columbia University Medical Center, Department of Dermatology, 611 First Washington Ave., New York, NY, 10022, USA  
<sup>c</sup> Member RIFM Expert Panel, Malmo University Hospital, Department of Occupational & Environmental Dermatology, Södra Fasanvägen 10B, Entrance 47, Malmo, SE-20502, Sweden  
<sup>d</sup> Member RIFM Expert Panel, School of Natural Resources & Environment, University of Michigan, Dana Building G110, 440 Church St., Ann Arbor, MI, 48109, USA  
<sup>e</sup> Member RIFM Expert Panel, Fraunhofer Institute for Toxicology and Experimental Medicine, Nikolaus-Fuchs-Straße 1, 38625, Hannover, Germany  
<sup>f</sup> Member RIFM Expert Panel, University of Sao Paulo, School of Veterinary Medicine and Animal Sciences, Department of Pathology, Av. Prof. Dr. Orlando Marques de Paiva, 87, Sao Paulo, CEP 05508-900, Brazil  
<sup>g</sup> Member RIFM Expert Panel, University of Würzburg, Department of Toxicology, Versbacher Str. 9, 97076, Würzburg, Germany  
<sup>h</sup> Member RIFM Expert Panel, Oregon Health Science University, 3181 SW Sam Jackson Park Rd., Portland, OR, 97239, USA  
<sup>i</sup> Member RIFM Expert Panel, Vanderbilt University School of Medicine, Department of Biochemistry, Center in Molecular Toxicology, 636 Robinson Research Building, 2200 Pierce Avenue, Nashville, TN, 37232-0146, USA  
<sup>j</sup> Member RIFM Expert Panel, University of Pennsylvania, Perelman School of Medicine, Center of Excellence in Environmental Toxicology, 1316 Biomedical Research Building (0808) H300, 421 Curie Boulevard, Philadelphia, PA, 19104-3083, USA  
<sup>k</sup> Member RIFM Expert Panel, The University of Tennessee, College of Veterinary Medicine, Department of Comparative Medicine, 2407 River Dr., Knoxville, TN, 37996-4100, USA  
<sup>l</sup> Member RIFM Expert Panel, Department of Pharmacology, University of Arizona, College of Medicine, 1501 North Campbell Avenue, P.O. Box 245030, Tucson, AZ 85724-5050, USA  
<sup>m</sup> Member RIFM Expert Panel, The Journal of Dermatological Science (JDS), Department of Dermatology, Hamamatsu University School of Medicine, 1-20-1 Handayama, Higashi-ku, Hamamatsu, 431-8552, Japan

Version: 051718. This version replaces any previous versions.  
Name: Benzyl isoamyl ether  
CAS Registry Number: 122-73-6  
Abbreviation/Definition List:  
2-Box Model - A RIFM, Inc. proprietary *in silico* tool used to calculate fragrance air exposure concentration  
AF - Assessment Factor  
BCF - Bioconcentration Factor  
Creme RIFM Model - The Creme RIFM Model uses probabilistic (Monte Carlo) simulations to allow full distributions of data sets, providing a more realistic estimate of aggregate exposure to individuals across a population (Comiskey et al., 2015, 2017; Safford et al., 2015, 2017) compared to a deterministic aggregate approach



DEREK - Derek Nexus is an *in silico* tool used to identify structural alerts  
DST - Dermal Sensitization Threshold  
ECHA - European Chemicals Agency  
EU - Europe/European Union  
GLP - Good Laboratory Practice  
IFRA - The International Fragrance Association  
LOEL - Lowest Observable Effect Level  
MOE - Margin of Exposure

<sup>\*</sup> Corresponding author.  
E-mail address: gsullivan@rifm.org (G. Sullivan).

<https://doi.org/10.1016/j.fct.2018.07.041>  
Received 17 May 2018; Received in revised form 18 June 2018; Accepted 22 July 2018  
Available online 25 July 2018  
0278-6915/ © 2018 Elsevier Ltd. All rights reserved.

# Fragrance Industry: History of Safety

- Team of experts (academics, physicians) with no affiliations to industry
- Critically review RIFM's safety assessments and research projects
- Determines safety of use for fragrance ingredients through consideration of available information and active generation of additional data

**EXPERT PANEL**  
for FRAGRANCE SAFETY

# Fragrance Industry: History of Safety

- Abundance of guidelines for RIFM and manufacturers to properly test
  - Good Laboratory Practice
  - Organization for Economic Cooperation and Development
  - National Toxicology Program



**NTP**  
National Toxicology Program  
U.S. Department of Health and Human Services

# Fragrance Industry: FDA Regulation

- Resource for FDA Office of Cosmetics and Colors in developing the *Modernization of Cosmetics Regulation Act*



# Conclusions

- Fragrance industry supports OMUFA
- Program can be most efficient if FDA does not have to duplicate work
- Fragrance Creators and RIFM are expert sources of extensive safety information on fragrances



Thank you!

---