

CAS-No.:	Not applicable. The scope of this Standard includes any CAS number(s) used to identify these fragrance ingredients.						
Synonyms:	Not applicable.						
History:	Publication date:		2009 (Amendment 44)	Previous Publications:		1977	
Implementation dates:					Not applicable.		

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	*These dates apply to the supply of frag	rance mixtures (formulas) only, not to the				
	finished consumer products in the marketplace.					
RECOMMENDATION:	SPECIFIC	CATION				

RECOMMENDATION.	SPECIFICATION	
FRAGRANCE INGREDIENT SPECIFICATION:	Allyl esters should only be used when the level of free Allylalcohol in the ester is less than 0.1%. This recommendation is based on the delayed irritant potential of Allylalcohol.	
FLAVOR REQUIREMENTS:	Due to the possible ingestion of small amounts of fragrance ingredients from their use in products in Categories 1 and 6, materials must not only comply with IFRA Standards but must also be recognized as safe as a flavoring ingredient as defined by the IOFI Code of Practice (www.iofi.org). For more details see chapter 1 of the Guidance for the use of IFRA Standards.	
CONTRIBUTIONS FROM OTHER SOURCES:	NONE TO CONSIDER BEYOND TRACES (SEE ALSO THE SECTION ON CONTRIBUTIONS FROM OTHER SOURCES IN CHAPTER 1 OF THE GUIDANCE FOR THE USE OF IFRA STANDARDS)	
INTRINSIC PROPERTY DRIVING RISK MANAGEMENT:	IRRITATION	

EXPERT PANEL FOR FRAGRANCE SAFETY RATIONALE / CONCLUSION:

The Expert Panel for Fragrance Safety reviewed all the available data for Allyl esters. Based on their expert judgement, they recommend to use the fragrance ingredient according to its specification mentioned above.

Allyl esters

REFERENCES:

The IFRA Standard on Allyl esters is based on at least one of the following publications:

• The RIFM Safety Assessment on Allyl esters is available at the RIFM Safety Assessment Sheet Database: http://fragrancematerialsafetyresource.elsevier.com/.

• Api A.M., Belsito D., Bruze M., Cadby P., Calow P., Dagli M. L., Dekant W., Dent M., Ellis G., Fryer A. D., Fukayama M., Griem P., Hickey C., Kromidas L., Lalko J., Liebler D.C., Miyachi Y., Politano V.T., Renskers K., Ritacco G., Salvito D., Schultz T.W., Sipes I. G., Smith B., Vitale D., Wilcox D.K. (2015). Criteria for the Research Institute for Fragrance Materials, Inc. (RIFM) safety evaluation process for fragrance ingredients. Food Chem Toxicol. 2015 Aug;82 Suppl:S1-S19 (doi: 10.1016/j.fct.2014.11.014). (http://fragrancematerialsafetyresource.elsevier.com/sites/default/files/Criteria Document Final.pdf).

• IDEA project (International Dialogue for the Evaluation of Allergens) Final Report on the QRA2: Skin Sensitisation Quantitative Risk Assessment for Fragrance Ingredients, September 30, 2016 (http://www.ideaproject.info/uploads/Modules/Documents/gra2-dossier-final--september-2016.pdf).

• Salvito D.T., Senna R. J., Federle T.W. (2002). A framework for prioritizing fragrance materials for aquatic risk assessment. Environ Toxicol Chem. 2002;21:1301-1308. (https://www.ncbi.nlm.nih.gov/pubmed/12069318).

• Fd. Cosmet, Toxicol, 15,611-21 (1977).

Additional information on the application of IFRA Standards is available in the Guidance for the use of IFRA Standards, publicly available at www.ifrafragrance.org.