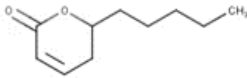


Massoia lactone

CAS-No.:	54814-64-1 51154-96-2	Molecular formula:	C ₁₀ H ₁₆ O ₂
	The scope of this Standard includes, but is not limited to the CAS number(s) indicated above; any other CAS number(s) used to identify this fragrance ingredient should be considered in scope as well.	Structure:	
Synonyms:	2-Decen-1,5-lactone (-)-2-Decenoic acid, 5-hydroxy, δ-lactone (R)-5,6-Dihydro-6-pentyl-2H-pyran-2-one 5,6-Dihydro-6-pentyl-2H-pyran-2-one 5-Hydroxy-2-decenoic acid δ-lactone 2H-Pyran-2-one, 5,6-dihydro-6-pentyl-, (R)- Massoi lactone		

History:	Publication date:	2015 (Amendment 48)	Previous Publications:	2008
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Implementation dates:	For new submissions*:	August 10, 2015
	For existing fragrance compounds*:	August 10, 2016
*These dates apply to the supply of fragrance mixtures (formulas) only, not to the finished consumer products in the marketplace.		

RECOMMENDATION:	PROHIBITION
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FRAGRANCE INGREDIENT PROHIBITION:	Massoia lactone should not be used as a fragrance ingredient.
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CONTRIBUTIONS FROM OTHER SOURCES:	NONE TO CONSIDER (SEE ALSO THE SECTION ON CONTRIBUTIONS FROM
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Massoia lactone**OTHER SOURCES IN CHAPTER 1 OF THE GUIDANCE FOR THE USE OF IFRA STANDARDS)****INTRINSIC PROPERTY DRIVING RISK MANAGEMENT: DERMAL SENSITIZATION****EXPERT PANEL FOR FRAGRANCE SAFETY RATIONALE / CONCLUSION:**

The Expert Panel for Fragrance Safety reviewed all the available data for Massoia lactone and recommends not to use Massoia lactone as or in fragrance ingredients in any finished product application.

REFERENCES:

The IFRA Standard on Massoia lactone is based on at least one of the following publications:

- The RIFM Safety Assessment on Massoia lactone if 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 (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/qra2-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>).

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.