

**3-Acetyl-2,5-dimethylfuran**

<b>CAS-No.:</b>	10599-70-9 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.
<b>Synonyms:</b>	3-Acetyl-2,5-dimethylfuran 1-(2,5-Dimethyl-3-furyl)ethanone 2,5-Dimethyl-3-acetylfuran Ethanone, 1-(2,5-dimethyl-3-furanyl)-

<b>History:</b>	Publication date:	2023 (Amendment 51)	Previous Publications:	Not applicable
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<b>Implementation dates:</b>	For new creation*:	August 30, 2023
	For existing creation*:	July 30, 2024
	*These dates apply to the supply of fragrance mixtures (formulas) only, not to the finished consumer products in the marketplace.	

<b>RECOMMENDATION:</b>	<b>PROHIBITION</b>
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<b>FRAGRANCE INGREDIENT PROHIBITION:</b>	3-Acetyl-2,5-dimethylfuran should not be used as a fragrance ingredient.
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<b>CONTRIBUTIONS FROM OTHER SOURCES:</b>	<b>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)</b>
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<b>INTRINSIC PROPERTY DRIVING RISK MANAGEMENT:</b>	<b>GENOTOXICITY</b>
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**EXPERT PANEL FOR FRAGRANCE SAFETY RATIONALE / CONCLUSION:**

The material 3-Acetyl-2,5-dimethylfuran has been reviewed by the Expert Panel for Fragrance Safety with the conclusion that it cannot be safely used as a fragrance ingredient. If the material is found as an impurity in other fragrance ingredients, leading to trace level presence in finished products, please check the latest version of the Guidance to the IFRA Standards for the respective IFRA procedure.

**REFERENCES:**

The IFRA Standard on 3-Acetyl-2,5-dimethylfuran is based on at least one of the following publications:

### 3-Acetyl-2,5-dimethylfuran

- The RIFM Safety Assessment on 3-Acetyl-2,5-dimethylfuran if available at the RIFM Fragrance Material Safety Assessment Center: <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., Salvido 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](http://fragrancematerialsafetyresource.elsevier.com/sites/default/files/Criteria_Document_Final.pdf)).
- Salvido 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>).
- Takasu, S. et al. 2022, Comprehensive evaluation of general toxicity, genotoxicity, and carcinogenicity of 3 acetyl 2,5 dimethylfuran using gpt delta rats (P-70)
- Kamatsu, T et al. 2021. Development of a new quantitative structure-activity relationship model for predicting Ames mutagenicity of food flavor chemicals using StarDrop™ autoModeller™. *Genes and Environment* 43 (16).

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](http://www.ifrafragrance.org)