Ethyl nonanoate

Synonyms ETHYL PELARGONATE

CAS Reference 123-29-5

Food Legislation

Council of Europe (CoE)	
Number	Comment
388	Listed by the Council of Europe as acceptable for use in food.

US Food and Drug Administration	
Number	Comment
172.515	Approved by the US FDA. FDA 21 CFR 172.515

Joint FAO/WHO Expert Committee on Food Additives (JECFA)		
Number	ADI	Comment
34	0-2.5 mg/kg bw/day	No safety concern at current levels of intake when used as a flavouring agent.

FEMA	
FEMA No.	Comment
2447	Generally recognised as safe as a flavour ingredient

Natural Occurrence and Use in Food
Found in apple, banana, grape, nectarine; used in candy, baked goods.

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Tobacco Product Related Chemical and Biological Studies for Ingredients Added in a Mixture

Smoke Chemistry		
Published Source	Level Tested %	Comment
BAT	0.001	At maximum application level this ingredient is not associated with significant increases in levels of Hoffmann analytes in smoke.
Ames Activity		
Published Source	Level Tested %	Comment
BAT	0.001	Within the sensitivity and specificity of the system the Ames activity of the cigarette smoke condensate was not increased by the addition of the ingredient.
Micronucleus		
Published Source	Level Tested %	Comment
BAT	0.001	Within the sensitivity of the in vitro micronucleus assay the activity of the cigarette smoke condensate was not increased by the addition of the ingredient.
Neutral Red		
Published Source	Level Tested %	Comment
BAT	0.001	Within the sensitivity of the test system the in vitro cytotoxicity of the cigarette smoke condensate was not increased by the addition of the ingredient.
Inhalation		
Published Source	Level Tested %	Comment
BAT	0.001	The results indicate that the addition of the ingredient had no discernible effect on the inhalation toxicity of mainstream smoke.

References
Baker RR, Pereira da Silva JR, Smith G. The effect of tobacco ingredients on smoke chemistry. Part I: Flavourings and additives. Food Chem Toxicol. 2004; 42 Suppl:S3-37.
Baker RR, Pereira da Silva JR, Smith G. The effect of tobacco ingredients on smoke chemistry. Part II: casing ingredients. Food Chem Toxicol. 2004; 42 Suppl:S39-52.

Baker RR, Massey ED, Smith G. An overview of the effects of tobacco ingredients on smoke chemistry and toxicity. Food Chem Toxicol. 2004; 42 Suppl:S53-83.

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Tobacco Product Related Chemical and Biological Studies for Ingredients Tested Singly

References
Baker RR, Bishop LJ. The pyrolysis of tobacco ingredients. J. Anal. Appl. Pyrolysis 2004, 71, 223-311.

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Toxicological Data on the Unburnt Ingredient

In vivo

Species	Test conditions	Endpoint	Result	Reference
Rat	Dietary Exposure to 0 or 10000 ppm for 16 weeks Equivalent to 0 or 500 mg/kg bw/day.	NOAEL	500 mg/kg bw/day	EFSA, 2007

References

The EFSA Journal (2008) 709-60. Flavouring Group Evaluation 2, Revision 1: Branched- and straight-chain aliphatic saturated primary alcohols and related esters of primary alcohols and straight-chain carboxylic acids and one straight-chain aldehyde from chemical groups 1 and 2

See:
http://www.efsa.europa.eu/sites/default/files/scientific_output/files/main_documents/709.pdf