

ACETANISOLE

MODULE 1

SUBSTANCE INFORMATION SHEET

ACETANISOLE

CAS number	100-06-1
Natural Origin	Occurs in cranberries, guava, grapes, mango, peppermint; used in frozen dairy products, hard candies.
Chemical Formula	C9-H10-O2
Synonymes	1-(4-Methoxyphenyl)Ethanone, 4-Acetylanisole; p-Acetylanisole; 4-Methoxyacetophenone; p-Methoxyacetophenone; Methyl 4-Methoxyphenyl Ketone
E number	N/A
FEMA GRAS number	2005

General Information

Council of Europe (CoE)

Number	Comment
570	N/A

US Food & Drug Administration (FDA)

Number	Comment
21 CFR 172.515	Approved by U.S. FDA -as Direct Food Additives

Joint FAO/WHO Expert Committee on Food Additives (JECFA)

Number	ADI	Comment
810	ACCEPTABLE	No safety concern at current levels of intake when used as a flavouring agent

European Food Safety Authority (EFSA)

Number	Comment
07.038	Aromatic ketones, secondary alcohols and related esters.

Flavors & Extracts Manufacturers Association (FEMA)

Number	Comment
2005	Generally Recognized as Safe as a flavor ingredient – GRAS 3

Uses and Exposure

Acetanisole is used as both food ingredient and in the preparation of fragrant in soaps, detergents, creams and perfumes.

Estimated Intake from Food and Drink

Daily Intake
The daily intake is estimated at 1 µg/kg bw/day in the USA and 3 µg/kg bw/day in Europe ¹ .

Summary of the Toxicological Investigations on the Use of the Substance in Tobacco Products

Smoke Chemistry

Internal Studies	Level Tested ppm	Comment
Carmines for Philip Morris	2, 5, 36, 109	The effect of the addition of acetanisole as part of a mixture at concentrations up to 109 ppm on the composition of the cigarette smoke was investigated.

Neutral Red Uptake Assay (NRU)

Internal Studies	Level Tested ppm	Comment
Carmines for Philip Morris	2, 5, 36, 109	The effect of the addition of acetanisole as part of a mixture at concentrations up to 109 ppm on the cytotoxicity, as measured by the Neutral Red Uptake assay, was investigated.

AMES Assay

Internal Studies	Level Tested ppm	Comment
Carmines for Philip Morris	2, 5, 36, 109	The effect of the addition of acetanisole as part of a mixture at concentrations up to 109 ppm on the mutagenic response, as measured by the Salmonella reverse mutation assay, was investigated.

Mouse Lymphoma Assay (MLA)

Internal Studies	Level Tested ppm	Comment
N/A	N/A	N/A

In vivo Micronucleus

Internal Studies	Level Tested ppm	Comment
N/A	N/A	N/A

Inhalation studies

Internal Studies	Level Tested ppm	Comment
Carmines for Philip Morris	2, 5, 36, 109	The effect of the addition of acetanisole as part of a mixture at concentrations up to 109 ppm on the toxicity of cigarette smoke, as suggested in a 90-day inhalation study, was investigated.

References

1. Safety evaluations of certain food additives and contaminants, WHO Food Additive Series 48: Aromatic substituted secondary alcohols, ketones, and related esters
<http://www.inchem.org/documents/jecfa/jecmono/v48je13.htm>

