**Botanical Source** 

**Synonyms** DIMETHYL-6-OCTEN-1-OL(3,77-)

DIMETHYL OCT-6-EN-1-OL (3,7-)

**IUPAC Name** 

CAS Reference 141-25-3

6812-78-8

**E Number** 

## **Food Legislation**

| Council of Europe (CoE) |                                                                                              |  |  |
|-------------------------|----------------------------------------------------------------------------------------------|--|--|
| Number                  | Comment                                                                                      |  |  |
| 76                      | Listed by the council of Europe as acceptable for use in food in Edition 3 but not Edition 4 |  |  |

| US Food and Drug Administration |                                           |  |
|---------------------------------|-------------------------------------------|--|
| Number                          | Comment                                   |  |
| 172.515                         | Approved by the US FDA, FDA 1 CFR 172.515 |  |

| Joint FAO/WHO Expert Committee on Food Additives (JECFA) |     |                                                                                |  |  |
|----------------------------------------------------------|-----|--------------------------------------------------------------------------------|--|--|
| Number                                                   | ADI | Comment                                                                        |  |  |
| 1222                                                     | -   | No safety concern at current levels of intake when used as a flavouring agent. |  |  |

| FEMA     |                                                                         |
|----------|-------------------------------------------------------------------------|
| FEMA No. | Comment                                                                 |
| 2980     | Generally recognised as safe as a flavour ingredient:GRAS List Number 3 |

#### **Natural Occurrence and Use in Food**

Found in geranium flowers; used in chewing gum, baked goods, ice cream.

| Estimated Intake from Food and Drink                         |        |  |  |
|--------------------------------------------------------------|--------|--|--|
| Daily Intake mg/kg/day FEMA Possible Average Daily Intake mg |        |  |  |
| 0.0001087                                                    | 1.2080 |  |  |

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

| Smoke Chemistry  |                |                                                                                                                                    |  |
|------------------|----------------|------------------------------------------------------------------------------------------------------------------------------------|--|
| Published Source | Level Tested % | Comment                                                                                                                            |  |
| Phillip Morris   | 0.00050        | An overall assessment of th4e data suggests that this ingredient did not adds to the toxicity of smoke.                            |  |
| BAT              | 0.00120        | 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                                                                                                                                                       |  |
| Phillip Morris                  | 0.00050 | Within the sensitivity and specificity of the system the Ames activity of the cigarette smoke was not increased by the addition of the ingredient.            |  |
| ВАТ                             | 0.00120 | 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                                                                                                                                                       |  |
| ВАТ                             | 0.00120 | 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                             | 0.00120 | 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. |  |
| Phillip Morris                  | 0.00050 | Within the sensitivity of the test system the in vitro cytotoxicity of the cigarette smoke was not                                                         |  |

|  | increased by the addition of the ingredient. |
|--|----------------------------------------------|
|  | ,                                            |

| Inhalation                      |         |                                                                                                                                                     |  |
|---------------------------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Published Source Level Tested % |         | Comment                                                                                                                                             |  |
| Phillip Morris                  | 0.00050 | The data indicated that the addition of the ingredient, when added with one of three groups, did not increase the inhalation toxicity of the smoke. |  |
| BAT                             | 0.00120 | 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.

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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.

Carmines EL. Evaluation of the potential effects of ingredients added to cigarettes. Part 1: cigarette design, testing approach, and review of results. Food Chem Toxicol. 2002; 40(1): 77-91.

Rustemeier K, Stabbert R, Haussmann HJ, Roemer E, Carmines EL. Evaluation of the potential effects of ingredients added to cigarettes. Part 2: chemical composition of mainstream smoke. Food Chem Toxicol. 2002; 40(1): 93-104.

Roemer E, Tewes FJ, Meisgen TJ, Veltel DJ, Carmines EL. Evaluation of the potential effects of ingredients added to cigarettes. Part 3: in vitro genotoxicity and cytotoxicity. Food Chem Toxicol. 2002; 40(1): 105-111.

Vanscheeuwijck PM, Teredesai A, Terpstra PM, Verbeeck J, Kuhl P, Gerstenberg B, Gebel S, Carmines EL. Evaluation of the potential effects of ingredients added to cigarettes. Part 4: subchronic inhalation toxicity. Food Chem Toxicol. 2002; 40(1): 113-131.

# 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.

## **Toxicological Data on the Unburnt Ingredient**

| Organis<br>m | Test | Route             | Reported Dose<br>(Normalized Dose) | Reference                                                                                              |
|--------------|------|-------------------|------------------------------------|--------------------------------------------------------------------------------------------------------|
| mouse        | LD50 | intramuscu<br>lar | 4gm/kg (4000mg/kg)                 | Journal of Scientific and Industrial Research, Section C: Biological Sciences. Vol. 21, Pg. 342, 1962. |
| rabbit       | LD50 | skin              | 3600mg/kg (3600mg/kg)              | Food and Chemical Toxicology. Vol. 30, Pg. 113S, 1992.                                                 |
| rat          | LDLo | oral              | 5gm/kg (5000mg/kg)                 | Food and Chemical Toxicology. Vol. 30, Pg. 113S, 1992.                                                 |