TAGETES OIL AND ABSOLUTE

CAS N°: 91722-29-1
8016-84-0

Empirical formula: Not applicable

Synonyms: **Tagetes absolute (Tagetes patula L.)**
Tagetes patula absolute
Tagetes patula, ext.
Tagetes minuta absolute
Tagetes oil

History: Initial reviews: October 1986, April 2001
See IFRA Information Letter 637 rev.

Current revision date: January 2001

Implementation date: for new submissions*: Not applicable
for existing fragrance compounds*: Not applicable

Next review date: 2006

* This date applies to the supply of fragrance compounds (formulas) only, not to the finished products in the marketplace.

STANDARD: **RESTRICTED**

RESTRICTIONS:

Limits in the finished product:

Skin-contact products:

Leave-on products: 0.01%

Rinse-off products: No restriction
including household cleaning products

Non skin-contact products: No restriction

Note box: The Standard is set due to the phototoxic effects of the material. The limit only applies to applications on skin, excluding rinse-off products.

If combinations of phototoxic fragrance ingredients are used, the use levels have to be reduced accordingly. The sum of the concentrations of all phototoxic ingredients, expressed in % of their recommended maximum level in the consumer product shall not exceed 100.

Fragrance material specification: Not applicable

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Contribution from other sources: None known

Critical effect: **Phototoxicity**

RIFM summaries:

Tagetes oils and absolutes obtained from *Tagetes minuta L.* (syn. *Tagetes glandulifera Schrank* and *Tagetes patula L.*) were evaluated by RIFM (Letizia and Api, 2000). A no-effect level for phototoxicity of 0.05% was determined on humans using Egyptian *Tagete minuta* (RIFM, 1986a).

- At 0.003% in guinea pigs, no observable effects, 0/10 (RIFM, 1985a).
- At 0.01% in guinea pigs, phototoxicity observed, 8/10 (RIFM, 1985b).
- At 100% in mice, phototoxicity was observed, 6/6 (RIFM,1986b)
- At 1% in mice, phototoxicity was observed, 6/6 (RIFM, 1986c).
- At 0.1% in mice, phototoxicity was observed, 6/6 (RIFM, 1986c).
- At 0.01% in mice, phototoxicity was observed, 2/6 (RIFM, 1986c).

Rexpan Rationale / Conclusion:

The RIFM Expert Panel reviewed the critical effect data for Tagetes oil and absolutes and recommended no change to the Standard (January 2001).

References:

Letizia C.S. and Api A.M (2000). A dermal safety evaluation of extracts from Tagetes plants used in fragrances. The Toxicologist, 54(1), 397.

Research Institute for Fragrance Materials, Inc. (1985a). Guinea Pig Phototoxicity Test. Unpublished report from Givaudan. Report number 3361, 17 December.

Research Institute for Fragrance Materials, Inc. (1985b). Guinea Pig Phototoxicity Test. Unpublished report from Givaudan. Report number 3362, 17 December.

Research Institute for Fragrance Materials, Inc. (1986a). Human Photosensitization Test. RIFM report number 1690, 21 November.

Research Institute for Fragrance Materials, Inc. (1986b). Mouse Phototoxicity Test. RIFM report number 3828, 25 June.

Research Institute for Fragrance Materials, Inc. (1986c). Mouse Phototoxicity Test. RIFM report number 4343, 31 July.