AMYLCYCLOPENTENONE

CAS N°: 25564-22-1

Empirical formula: $C_{10}H_{16}O$

Synonyms: **2-Cyclopenten-1-one, 2-pentyl-**
2-Pentylcyclopent-2-en-1-one
2-Pentyl-2-cyclopentenone

History: Initial reviews: November 1987, July 1994

Current revision date: September 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: 0.1%

Rinse-off products: 0.1%
including household cleaning products

Non skin-contact products: 1%

Note box: In compliance with the outcome of the REXPAN evaluation (September 2001), the permitted non-skin contact level has been increased from 0.2 to 1% to follow the general principle of representing the NOEL.

Fragrance material specification: Not applicable

Contribution from other sources: None known

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Critical effect: **Sensitization**

RIFM summaries:

The IFRA Standard of 0.1% (skin-contact level) is based on results of a human maximization study at 1% in petrolatum, which showed no sensitization responses in 27 subjects (RIFM, 1987). Two earlier human maximization studies at 10% in petrolatum showed sensitization reactions in 1/28 (RIFM, 1980) and 1/22 (RIFM, 1981) subjects, respectively.

Rexpan Rationale / Conclusion:

The RIFM Expert Panel reviewed the critical effect data for amylcyclopentenone and recommended no change to the skin-contact limit and that the non skin-contact limit be changed to 1% (September 2001).

References:

Research Institute for Fragrance Materials, Inc. (1980). Report on human maximization studies. RIFM report number 1790, 29 February.

Research Institute for Fragrance Materials, Inc. (1981). Report on human maximization studies. RIFM report number 1792, 18 March.

Research Institute for Fragrance Materials, Inc. (1987). Report on human maximization studies. RIFM report number 5669, 29 June.