2-METHOXY-4-METHYLPHENOL

CAS N°: 93-51-6

Empirical formula: $C_8H_{10}O_2$

Synonyms:
Creosol
***p*-Creosol**
***p*-Cresol, 2-methoxy-**
Homo catechol monomethyl ether
Homoguaiacol
1-Hydroxy-2-methoxy-4-methylbenzene
4-Hydroxy-3-methoxytoluene
2-Methoxy-*p*-cresol
3-Methoxy-4-hydroxytoluene
4-Methylguaiacol
***p*-Methylguaiacol**
4-Methyl-2-methoxyphenol
Phenol, 2-methoxy-4-methyl-
Valspice

History:

Initial reviews:	January 1999	
Current revision date:	January 2002	
Implementation date:	for new submissions*:	Not applicable
	for existing fragrance compounds*:	Not applicable
Next review date:	2007	

* 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: 0.01%
including household cleaning products

Non skin-contact products: 0.1%

Note box:

Fragrance material specification: Not applicable

2-METHOXY-4-METHYLPHENOL

Contribution from other sources: Known but not of relevance.

Critical effect: **Sensitization**

RIFM summaries:

Human studies:

A human RIPT study at 0.1% in 75% ethanol/25% diethyl phthalate showed no sensitization reactions in 106 subjects (RIFM, 1998).

Animal studies:

A Magnusson & Kligman guinea pig maximization study was conducted in which induction intradermal injections were administered at 1% in Freund's Complete Adjuvant and maize oil followed 6-7 days later by a 24-hour closed patch with 75% in maize oil. After 10-14 days, the guinea pigs were challenged with 10% (24-hr closed patch) and 7/10 reactions were observed (RIFM, 1997).

In a standard LLNA, the EC3 value was calculated to be 5.8% (Basketter et al., 2003).

Rexpan Rationale / Conclusion:

The RIFM Expert Panel reviewed the critical effect data for 2-methoxy-4-methylphenol and recommended no change to the Standard (January 2002).

References:

D.A.Basketter, N.Gilmour, R.J.Dearman, I.Kimber, C.A.Ryan and E.Gerberick (2003). Classification of skin sensitisation potency using the Local Lymph Node Assay. The Toxicologist, 72(S-1), 101.

Research Institute for Fragrance Materials, Inc. (1998). Repeated insult patch test of creosol in human subjects. RIFM report number 33100, 15 June.

Research Institute for Fragrance Materials, Inc. (1997). Creosol: Acute dermal irritation test in rabbits. Unpublished report from Givaudan-Roure, 8 May. Report number 31242.