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Methyl Salicylate Liniment

General Notices

Methyl Salicylate Cutaneous Emulsion

DEFINITION

Methyl Salicylate is a *cutaneous emulsion*. It contains 25% v/v of Methyl Salicylate in Arachis Oil or other suitable fixed oil.

The liniment complies with the requirements stated under Liquids for Cutaneous Application and with the following requirements.

Content of methyl salicylate, $C_8H_8O_3$

23.0 to 26.5% v/v.

CHARACTERISTICS

The liniment has a characteristic odour.

IDENTIFICATION

In the Assay, the chromatogram obtained with solution (2) shows a peak with the same retention time as that due to methyl salicylate in the chromatogram obtained with solution (1).

ASSAY

Carry out the method for *gas chromatography*, Appendix III B. using the following solutions in *petroleum spirit (boiling range, 80° to 100°)*.

(1) 4% w/v of the preparation being examined and 1% w/v of *benzyl alcohol* (internal standard).
(2) 4% w/v of the preparation being examined.
(3) 1% w/v of *benzyl alcohol* (internal standard) and 1% w/v of *methyl salicylate*.

CHROMATOGRAPHIC CONDITIONS

(a) Use a glass column (1.5 m × 4 mm) packed with *diatomaceous support* (60 to 80 mesh) coated with 10% w/w of polyethylene glycol 1540.
(b) Use *helium* as the carrier gas.
(c) Use isothermal conditions maintained at 110°.
(d) Use an inlet temperature of 110°.
(e) Use a flame ionisation detector at a temperature of 110°.
(f) Inject 1 µL of each solution.

DETERMINATION OF CONTENT

Determine the *weight per mL* of the liniment, Appendix V G, and calculate the content of $C_8H_8O_3$, volume in volume, taking the content of $C_8H_8O_3$ in *methyl salicylate* to be 100.0% and its *weight per mL* to be 1.18 g.