



Factory: Plot No.17/24,17/22,17/23,17/13
 M.I.D.C Talója-410 208, Taluka Panvel.
 Dist. Raigad (Maharashtra) India.
 Tel.:+91-8655906995,8655906997,8655906998.
 E-mail :info@srikem.com,despatch@srikem.com
 Website: www.srikem.com

CERTIFICATE OF ANALYSIS

Product : Permethrin EP	COA No. : 0235/25
Batch No. : 254043003	Report No. : FP-068/25
Mfg. Date : Jan.2025	Mfg. Lic. No. : KD-324
Exp. Date : Dec.2028	Dispatch Qty : 100 Kg
CAS No. : 52645-53-1	

TEST	OBSERVATION	LIMITS
Description	Slightly brownish viscous liquid, semi solid.	Colorless or slightly brownish viscous liquid, semi solid or crystalline solid.
Solubility	Practically insoluble in Water, very soluble in Heptane, freely soluble in anhydrous Ethanol, sparingly soluble in Ethylene glycol.	Practically insoluble in Water, very soluble in Heptane, freely soluble in anhydrous Ethanol, sparingly soluble in Ethylene glycol.
Identification	A) By IR IR Spectrum of the sample is comparable with IR Spectrum of Permethrin CRS. B) By HPLC The 2 principal peak in the chromatogram obtained with the test solution are similar in retention time and in cis/trans ratio to the 2 principal peaks in the chromatogram obtained with the reference solution. (cis/trans ratio = about 0.36)	A) By IR IR Spectrum comparable with that in "IR Spectrum of Permethrin (25:75) WS standard." B) By HPLC The 2 principal peaks in the chromatogram obtained with the test solution are similar in retention time and in cis/trans ratio to the 2 principal peaks in the chromatogram obtained with the reference solution. (cis/trans ratio = about 0.3)
Related Substances	Impurity B: BDL Impurity C: 0.02% Other unspecified impurity: 0.07% Total impurities: 0.09%	Impurity B: NMT 0.15% Impurity C: NMT 0.15% Other unspecified impurity: NMT 0.10% Total impurity: NMT 0.5 %
Water	0.14%	Not More Than 0.25%
Sulphated Ash	0.05%	Not More Than 0.1%
Assay By HPLC (On anhydrous substance)	99.8%	98.0% to 102.0% C ₂₁ H ₂₀ Cl ₂ O ₃
Cis Isomer	26.23%	23.0% to 27.0%
Trans Isomer	73.77%	73.0% to 77.0%
Residual Solvents	IPA : BDL Toluene : 7.93 ppm DMF : BDL *Benzene : BDL	IPA : NMT 5000ppm Toluene : NMT 890ppm DMF : NMT 880 ppm *Benzene : NMT 2 ppm

Note: - Before sampling stir well & warm up to 70°C Permethrin solidifies below 35°C. In case of solidification please warm up to 70 to 75°C to get liquid (Before use). This does not affect the quality

Remark: Passes as per EP Specification.

*Benzene is not used in process, but tested due to the use of toluene

Prepared By/Date:-

Mar. 05, 2025

Mr. Atul Raut (QA Chemist)

Approved By/Date :-

Mar. 05, 2025

Mr. Uday Vetal (Manager QA)

Head. Off.: #311, Bldg.No.6, Jogani Ind.Estate, Chunabhatti Mumbai-400 022.

Tel.:+91-22-24055088 Fax+91-22-24055070

Annexure No.: SQA/066/A01-00

SOP No.: SQA/O/066

Page 1 of 1