

**METHYLENE CHLORIDE Ph.Eur SPECIFICATION**

Sr.No.	Test	Specifications
1	Appearance	Clear, colourless, volatile liquid.
2	Solubility	Sparingly soluble in water, miscible with ethanol (96%).
3	Identification	
	A) Refractive index at 20°C ± 0.5°C.	1.423 to 1.425 at 20°C ± 0.5°C.
	B) By IR	The spectrum obtained with the sample corresponds in position & relative intensity to those in the spectrum obtained with that of Methylene chloride CRS or its Working standard. (Purity index should not be less than 0.99)
	C) Relative density at 20°C	1.320 to 1.332 at 20°C.
	D) Chemical Test	A violet colour is produced.
	E) Chemical Test	Passes the test
4	Appearance of solution	The substance to be examined is clear and colourless
5	Acidity	Not more than 0.15 ml of 0.1M sodium hydroxide should require to change the colour of the indicator to blue.
6	Relative density at 20°C.	1.320 to 1.332 at 20°C.
7	Refractive index at 20°C ± 0.5°C.	1.423 to 1.425 at 20°C ± 0.5°C.
8	Ethanol, 2-methylbut-2-ene and volatile impurities (By GC) Ethanol 2-methylbut-2-ene Impurity A (Carbon tetra-chloride) Impurity B (Chloroform) Sum of impurities other than ethanol and 2-methylbut-2-ene	Maximum 2.0% v/v Maximum 300 ppm v/v Maximum 10 ppm v/v Maximum 50 ppm v/v Maximum 0.1% v/v
9	Free Chlorine	No blue colour should develop.
10	Residue on evaporation	Maximum 20 ppm.
11	Water	Maximum 0.02% m/m.
12	Residual solvents (By GC) a) Methanol b) Ethanol c) 2-Methyl-2-butene d) Chloroform e) Carbon tetra chloride	Not more than 3000 ppm v/v Not more than 5000 ppm v/v Not more than 300 ppm v/v Not more than 60 ppm v/v Not more than 4 ppm v/v