

CHAPTER 5 : SPECIFICATIONS OF REFERENCE FUEL PRESCRIBED FOR EMISSION TESTING OF VEHICLES EQUIPPED WITH A DIESEL ENGINE

- 1 Scope : This Chapter specifies the reference fuel to be used for power and emission measurements, as mentioned in para 3.2 of Chapter 3 and 2.3 of Chapter 4 and para 4.4 of Chapter 6 of this Part and para 4.4 of Chapter 3 of Part V to this Rule.
- 2 Specifications of reference fuel : The reference fuel should meet the following requirements :

	Characteristics	Limits	Method of test (Ref. Part of IS 1448)
2.1	Specific Gravity at 288K	0.835-0.850	P:32/P:16
2.2	Cetane Number or Cetane Index	45 min.	P:9
2.3	Distillation,K 50%Vol. recovery 90%Vol. recovery Final Boiling Point	518 min 583-613 643 max.	P:18
2.4	Kinematic Viscosity cSt at 313K	2.5-4.0	P:25
2.5	Sulphur Content, % mass	0.3-0.5	P:33
2.6	Flash point,K	305 min.	P:20
2.7	Pour point,K	279 max.	P:10
2.8	Conradson carbon residue on 10% dist. residuum, % mass	0.20 max.	P:8
2.9	Ash content, % mass	0.01 max	P:4
2.10	Water Content,% mass	0.05 max	P:40
2.11	Copper corrosion 373 Deg.K	1 max	P:15
2.12	Acidity, total, in terms of mg of KOH/g	0.50	P:2