

INDIAN STANDARD SPECIFICATIONS FOR Absolute Alcohol
(IS :321 – 1964)

Sr. No	Characteristics	Requirement of Rectified Spirits Required for :		
		Special Grade	Grade - I	Grade - II
1	Specific gravity at 15.6°/15.6° (or 60°/60° F)	0.7961	0.7961	0.7961
2	Ethanol Content :- a) Percent by volume at 15.6° C (or 60° F) Max.	99.50	99.50	99.50
3	Miscibility with water	Miscible	Miscible	Miscible
4	Alkalinity	NIL	NIL	NIL
5	Acidity (as CH ₃ COOH) % by weight, Max.	0.006	0.006	0.006
6	Residue on evaporation % by weight, Max.	0.005	0.005	0.005
7	Aldehyde content (as CH ₃ CHO) Gms/100 ml, Max.	0.10	0.006	0.005
8	Ester content (as CH ₃ COOC ₂ H ₅) Gms/100 ml, Max.	0.02	---	---
9	Copper (as Cu), gms/100 ml, Max.	---	0.004	---
10	Lead (as Pb), gms/100 ml, Max.	---	0.0001	---
11	Methyl Alcohol content	---	To satisfy the requirement of test	---
12	Fusel oil content	---	To satisfy the requirement of test	---
13	Ketones, isopropyl alcohol & tertiary butyl alcohol	---	To satisfy the requirement of test	---
14	Total Sulfer and compounds of Sulphur (as S), % by mass. Max.	0.001	---	---
15	Sulphur DI-Oxide (as SO ₂). % by weight, Max.	0.00005	---	---

INDIAN STANDARD SPECIFICATIONS FOR EXTRA NEUTRAL ALCOHOL
(IS : 6613 – 1972)

Sr. No	Characteristics	Requirement
1	Relative density at 15/15° C	0.81245 to 0.81679
2	Ethanol Content,% by Volume. At 15.6° C	94 to 95
3	Miscibility with water	Miscible
4	Alkalinity	NIL
5	Acidity (as CH ₃ COOH). Gms/100 ml, Max.	0.002
6	Residue on evaporation	0.002
7	Esters (as CH ₃ OOC ₂ H ₅), gms/100 ml.Max.	0.01
8	Lead (as Pb), gms/100 ml, Max.	NIL
9	Methyl alcohol content	To pass the test
10	Furfural Content	To pass the test
11	Aldehyde (as CH ₃ CHO),gms/100 ml. Max.	0.004
12	Permanganate reaction time, Minutes,Min.	30
13	Copper (Cu), gms/100 ml, Max.	0.002
14	Isopropyl Alcohol, acetone and other ketoses	To pass the test

INDIAN STANDARD SPECIFICATIONS FOR RECTIFIED SPIRIT
(IS :323 – 1959)

Sr. No	Characteristics	Requirement of Rectified Spirits : Required for :	
		Grade - I	Grade - II
1	Specific gravity at 15.6°/15.6° (or 60°/60° F)	0.8171	0.8171
2	Ethanol Content :-		
	a) Percent by volume at 15.6° C (or 60° F) Min.	94.68	94.68
	b) Degree Over-proof, Min.	66.00	66.00
3	Miscibility with water	Miscible	Miscible
4	Alkalinity	NIL	NIL
5	Acidity (as CH ₃ COOH) % by weight, Max.	0.002	0.01
6	Residue on evaporation % by weight, Max.	0.005	0.01
7	Aldehyde content (as CH ₃ CHO) Gms/100 ml, Max.	0.006	0.10
8	Ester content (as CH ₃ COOC ₂ H ₅) Gms/100 ml, Max.	0.02	---
9	Copper (as Cu),gms/100 ml,Max.	0.004	---
10	Lead (as Pb), gms/100 ml, Max.	0.0001	---
11	Methyl Alcohol content	To satisfy the requirement of test	---
12	Fusel oil content	To satisfy the requirement of test	---
13	Furfural content	To satisfy the requirement of test	---