

SPECIFICATION
PRODUCT: ETHYL ALCOHOL/ETHANOL-CAS [64-17-5]
(HYDROUS)
INDUSTRIAL GRADE

SR.NO.	CHARECTERISTICS	SPECIFICATION
1.	Appearance.	Clear, colorless, volatile liquid, free from suspended matters.
2.	Specific gravity at 20°/20° C	Max. 0.8126
3.	Ethanol content, % v/v at 20° C	Min. 95.00
4.	Miscibility with water.	Miscible.
5.	Alkalinity.	Nil.
6.	Acidity (as Acetic acid), mg/L	Max. 100.00
7.	Aldehyde content (as Acetaldehyde), mg/L	Max. 1000.00
8.	Ester content (as Ethyl acetate), mg/L	Max. 200.00
9.	Methanol content, mg/L	Max. 200.00
10.	Fusel Oil /Higher Alcohol content, mg/L	Max. 400.00
11.	Furfural content, mg/L	Max. ND
12.	Residue on evaporation % by mass	Max. 0.010
13.	Copper (as Cu), mg/L	Max. 4.000
14.	Lead (as Pb), mg/L	Max. 1.000

Specification No:-SCAPL-001

In our continuous effort to improve the quality of our product, the specifications are liable to periodic review.

SPECIFICATION
PRODUCT: ETHYL ALCOHOL/ETHANOL-CAS [64-17-5]
(ANHYDROUS)
INDUSTRIAL GRADE

SR.NO.	CHARECTERISTICS	SPECIFICATION
1.	Appearance.	Clear, colorless, volatile liquid, free from suspended matters.
2.	Specific gravity at 15.6 °/15.6° C, Max.	0.7961
3.	Ethanol content, % v/v at 15.6° C Min.	99.500
4.	Miscibility with water.	Miscible.
5.	Alkalinity.	Nil.
6.	Acidity, (as Acetic acid), mg/L Max.	60.00
7.	Aldehyde content, (as Acetaldehyde), mg/L Max.	1000.00
8.	Ester content, (as Ethyl acetate), mg/L Max.	200.00
9.	Methanol content, mg/L Max.	200.00
10.	Fusel Oil /Higher Alcohol content, mg/L Max.	400.00
11.	Furfural content, mg/L Max.	ND
12.	Residue on evaporation % w/w Max.	0.005
13.	Copper, (as Cu), mg/L Max.	4.00
14.	Lead, (as Pb), mg/L Max.	1.00
15.	Water content % v/v Max.	0.500

Specification No:-SCAPL-002

In our continuous effort to improve the quality of our product, the specifications are liable to periodic review.

SPECIFICATION
PRODUCT: ETHYL ALCOHOL/ETHANOL-CAS [64-17-5]
(HYDROUS)
PHARMA GRADE

SR.NO.	CHARECTERISTICS	SPECIFICATION
1.	Appearance.	Clear, colorless, volatile liquid, free from suspended matters.
2.	Specific gravity at 20°/20° C Max.	0.8126
3.	Ethanol content, % v/v at 20° C Min.	95.00
4.	Miscibility with water.	Miscible.
5.	Alkalinity.	Nil.
6.	Acidity, (as Acetic acid), mg/L Max.	60.00
7.	Aldehyde content, (as Acetaldehyde), mg/L Max.	60.00
8.	Ester content, (as Ethyl acetate), mg/L Max.	200.00
9.	Methanol content, mg/L Max.	150.00
10.	Fusel Oil /Higher Alcohol content, mg/L Max.	300.00
11.	Furfural content, mg/L Max.	ND
12.	Residue on evaporation % by mass Max.	0.005
13.	Copper, (as Cu), mg/L Max.	4.000
14.	Lead, (as Pb), mg/L Max.	1.000

Specification No:-SCAPL-003

In our continuous effort to improve the quality of our product, the specifications are liable to periodic review.

SPECIFICATION
PRODUCT: ETHYL ALCOHOL/ETHANOL-CAS [64-17-5]
(ANHYDROUS)
PHARMA GRADE

SR.NO.	CHARECTERISTICS	SPECIFICATION
1.	Appearance.	Clear, colorless, volatile liquid, free from suspended matters.
2.	Specific gravity at 15.6 °/15.6° C, Max.	0.7961
3.	Ethanol content, % v/v at 15.6° C Min.	99.5
4.	Miscibility with water.	Miscible.
5.	Alkalinity.	Nil.
6.	Acidity, (as Acetic acid), mg/L Max.	60.00
7.	Aldehyde content, (as Acetaldehyde), mg/L Max.	60.00
8.	Ester content, (as Ethyl acetate), mg/L Max.	200.00
9.	Methanol content, mg/L Max.	150.00
10.	Fusel Oil /Higher Alcohol content, mg/L Max.	300.00
11.	Furfural content, mg/L Max.	ND
12.	Residue on evaporation % w/w Max.	0.005
13.	Copper, (as Cu), mg/L Max.	4.00
14.	Lead, (as Pb), mg/L Max.	1.00
15.	Water content % v/v Max.	0.500

Specification No:-SCAPL-004

In our continuous effort to improve the quality of our product, the specifications are liable to periodic review.

SPECIFICATION
PRODUCT: ETHYL ALCOHOL/ETHANOL-CAS [64-17-5]
(HYDROUS)
POTABLE GRADE

SR.NO.	CHARECTERISTICS	SPECIFICATION
1.	Appearance.	Clear, colorless, volatile liquid, free from suspended matters.
2.	Specific gravity at 20°/20° C, Max.	0.8127
3.	Ethanol content, % v/v at 20° C Min.	≥96.0
4.	Miscibility with water.	Miscible.
5.	Alkalinity.	Nil to phenolphthalein.
6.	Acidity, (as Acetic acid), mg/L Max.	30.00
7.	Aldehyde content, (as Acetaldehyde), mg/L Max.	30.00
8.	Ester content, (as Ethyl acetate), mg/L Max.	100.00
9.	Methanol content, mg/L Max.	160.00
10.	Fusel Oil /Higher Alcohol content, mg/L Max.	150.00
11.	Furfural content, mg/L Max.	ND.
12.	Permanganate time, Minutes Min.	10

Specification No:-SCAPL-005

In our continuous effort to improve the quality of our product, the specifications are liable to periodic review.

SPECIFICATION
PRODUCT: ETHYL ALCOHOL/ETHANOL-CAS [64-17-5]
(HYDROUS)
PERFUMERY GRADE

SR.NO.	CHARECTERISTICS	SPECIFICATION
1.	Appearance.	Clear, colorless, volatile liquid, free from suspended matters.
2.	Specific gravity at 15.6 °/15.6° C, Max.	0.8337
3.	Ethanol content, % v/v at 15.6° C.	≥90.0
4.	Miscibility with water.	Miscible.
5.	Alkalinity.	Nil.
6.	Acidity, (as Acetic acid), % w/w Max.	0.0020
7.	Aldehyde content, (as Acetaldehyde), mg/L Max.	To pass the test.
8.	Fusel Oil /Higher Alcohol content, mg/L Max.	To pass the test.

Specification No:-SCAPL-006

In our continuous effort to improve the quality of our product, the specifications are liable to periodic review.

SPECIFICATION
PRODUCT: ETHYL ALCOHOL/ETHANOL-CAS [64-17-5]
(HYDROUS)
NEUTRAL GRADE

SR.NO.	CHARECTERISTICS	SPECIFICATION
1.	Appearance.	Clear, colorless, volatile liquid, free from suspended matters.
2.	Relative Density at 15 ° C.	0.81245 to 0.81679
3.	Ethanol content ,% v/v at 15.6° C.	94.00 to 96.00
4.	Miscibility with water.	Miscible.
5.	Alkalinity.	Nil.
6.	Acidity ,(as Acetic acid), mg/L Max.	20.00
7.	Aldehyde content, (as Acetaldehyde), mg/L Max.	40.00
8.	Ester content ,(as Ethyl acetate),mg/L Max.	100.00
9.	Methanol content, mg/L Max.	200.00
10.	Isopropyl Alcohol, Acetone & other Ketones Max.	To satisfy the test.
11.	Furfural content, mg/L Max.	ND.
12.	Residue on evaporation % by mass Max.	0.002
13.	Permanganate time, Minutes Min.	30

Specification No:-SCAPL-007

In our continuous effort to improve the quality of our product, the specifications are liable to periodic review.

SPECIFICATION
PRODUCT: ETHYL ALCOHOL/ETHANOL-CAS [64-17-5]
(HYDROUS)
ENA (M) GRADE

SR.NO.	CHARECTERISTICS	SPECIFICATION
1.	Appearance.	Clear, colorless, volatile liquid, free from suspended matters.
2.	Odor & taste.	No foreign odor or taste
3.	Clarity of sol ⁿ on 1:19 dilution with water.	Clear & miscible completely.
4.	Specific gravity at 20°/20° C, Max.	0.8087
5.	Ethanol content, % v/v at 20° C.	≥ 96.00
6.	Miscibility with water.	Miscible.
7.	Alkalinity.	Nil to phenolphthalein.
8.	Acidity, (as Acetic acid), mg/L Max.	30.00
9.	Aldehyde content, (as Acetaldehyde) mg/L Max.	10.00
10.	Ester content, (as Ethyl acetate) mg/L Max.	100.00
11.	Methanol content, mg/L Max.	150.00
12.	Higher Alcohols, mg/L Max.	30.00
13.	Furfural content, mg/L Max.	ND.
14.	Residue on evaporation, mg/L Max.	20.00
15.	Permanganate time, Minutes Min.	30

Specification No:-SCAPL-008

In our continuous effort to improve the quality of our product, the specifications are liable to periodic review.

SPECIFICATION
PRODUCT: ETHYL ALCOHOL/ETHANOL-CAS [64-17-5]
(ANHYDROUS)
ENA (M) GRADE

SR.NO.	CHARECTERISTICS	SPECIFICATION
1.	Appearance.	Clear, colorless, volatile liquid, free from suspended matters.
2.	Odor & taste.	No foreign odor or taste.
3.	Clarity of sol ⁿ on 1:19 dilution with water.	Clear & miscible completely.
4.	Specific gravity at 15.6 °/15.6° C, Max.	0.7961
5.	Ethanol content, % v/v at 20° C.	≥ 99.50
6.	Miscibility with water.	Miscible.
7.	Alkalinity.	Nil to phenolphthalein.
8.	Acidity, (as Acetic acid), mg/L Max.	30.00
9.	Aldehyde content, (as Acetaldehyde) mg/L Max.	10.00
10.	Ester content, (as Ethyl acetate) mg/L Max.	100.00
11.	Methanol content, mg/L Max.	150.00
12.	Higher Alcohols, mg/L Max.	30.00
13.	Furfural content, mg/L Max.	ND.
14.	Residue on evaporation, mg/L Max.	20.00
15.	Permanganate time, Minutes Min.	30
16.	Water content % v/v Max.	0.500

Specification No:-SCAPL-009

In our continuous effort to improve the quality of our product, the specifications are liable to periodic review.

SPECIFICATION
PRODUCT: ETHYL ALCOHOL/ETHANOL-CAS [64-17-5]
(HYDROUS)
ENA (G) GRADE

SR.NO.	CHARECTERISTICS	SPECIFICATION
1.	Appearance.	Clear, colorless, volatile liquid, free from suspended matters.
2.	Odor & taste.	No foreign odor or taste.
3.	Clarity of sol ⁿ on 1:19 dilution with water.	Clear & miscible completely.
4.	Specific gravity at 20°/20° C, Max.	0.8087
5.	Ethanol content, % v/v at 20° C .	≥ 96.00
6.	Miscibility with water.	Miscible.
7.	Alkalinity.	Nil to phenolphthalein.
8.	Acidity, (as Acetic acid), mg/L Max.	15.00
9.	Aldehyde content, (as Acetaldehyde) mg/L Max.	10.00
10.	Ester content, (as Ethyl acetate) mg/L Max.	25.00
11.	Methanol content, mg/L Max.	60.00
12.	Higher Alcohols, mg/L Max.	25.00
13.	Furfural content, mg/L Max.	ND
14.	Residue on evaporation, mg/L Max.	20.00
15.	Permanganate time, Minutes Min.	30

Specification No:-SCAPL-010

In our continuous effort to improve the quality of our product, the specifications are liable to periodic review.

SPECIFICATION
PRODUCT: ETHYL ALCOHOL/ETHANOL-CAS [64-17-5]
(ANHYDROUS)
ENA (G) GRADE

SR.NO.	CHARECTERISTICS	SPECIFICATION
1.	Appearance.	Clear, colorless, volatile liquid, free from suspended matters.
2.	Odor & taste.	No foreign odor or taste.
3.	Clarity of sol ⁿ on 1:19 dilution with water.	Clear & miscible completely.
4.	Specific gravity at 15.6 °/15.6° C, Max.	0.7961
5.	Ethanol content, % v/v at 15.6° C .	≥ 99.50
6.	Miscibility with water.	Miscible.
7.	Alkalinity.	Nil to phenolphthalein.
8.	Acidity, (as Acetic acid), mg/L Max.	15.00
9.	Aldehyde content, (as Acetaldehyde) mg/L Max.	10.00
10.	Ester content, (as Ethyl acetate) mg/L Max.	25.00
11.	Methanol content, mg/L Max.	60.00
12.	Higher Alcohols, mg/L Max.	25.00
13.	Furfural content, mg/L Max.	ND
14.	Residue on evaporation, mg/L Max.	20.00
15.	Permanganate time, Minutes Min.	30
16.	Water content % v/v Max.	0.500

Specification No:-SCAPL-011

In our continuous effort to improve the quality of our product, the specifications are liable to periodic review.

SPECIFICATION
PRODUCT: ETHYL ALCOHOL/ETHANOL-CAS [64-17-5]
(HYDROUS)
SPECIAL GRADE TO MEET EP/BP/USP/IP

SR. NO.	CHARECTERISTICS	SPECIFICATION
1.	Description.	Clear, colorless, mobile, volatile liquid, free from any solid materials. Has a characteristic odor and produces burning sensation on the tongue. Readily volatilized even at low temperature, and boils at about 78° C. Is flammable.
2.	Solubility.	Miscible with water and many organic solvents.
3.	Clarity of solution.	Test solution A and Test solution B show the same clarity as that of water, or their opalescence is not more pronounced than that of reference suspension A.
4.	Color of solution.	The test solution has the appearance of water or is not more intensely colored than the standard solution.
5.	Identification- (A) By Sp. gravity. (B) By IR.	It complies the test for specific gravity. The IR Spectrum of the test exhibits maxima only at the same wavelength as that of a similar preparation of hydrated Alcohol.
6.	Specific gravity.	Not more than 0.7962 at 15.56° C, Indicating not less than 92.3% of C ₂ H ₅ OH, by weight, corresponding to not less than 94.9% to 96 % by volume at 15.56° C.
7.	Acidity or alkalinity.	The solution is colorless. On addition of 1.0 ml of 0.01 N Sodium hydroxide, to 20 ml alcohol, it should change to pink.
8.	Ultraviolet absorption.	At 240 nm absorbance is not more than 0.40 Between 250 nm and 260 nm maximum absorbance is not more than 0.30, Between 270 nm and 340 nm maximum absorbance is not more than 0.10, Between 235 nm and 340 nm the absorbance curves. Is smooth. (All requirements are in 5 cm cell).
9.	Volatile impurities by GC. Methanol Sum of content of acetaldehyde and acetal expressed as acetaldehyde Benzene Total of all other impurities	Not more than 200 ppm. Not more than 10 ppm. Not more than 2 ppm. Not more than 300 ppm.
10.	Limit of non-volatile residue	The weight of the residue does not exceed 2.5 mg/100 ml=25 ppm.

Specification No:-SCAPL-012

SPECIFICATION
PRODUCT: ETHYL ALCOHOL/ETHANOL-CAS [64-17-5]
(ANHYDROUS)
SPECIAL GRADE TO MEET EP/BP/USP/IP

SR. NO.	CHARECTERISTICS	SPECIFICATION
1.	Description.	Clear, colorless, mobile, volatile liquid, free from any solid materials. Has a characteristic odor and produces burning sensation on the tongue. Readily volatilized even at low temperature, and boils at about 78° C. Is flammable.
2.	Solubility.	Miscible with water and many organic solvents.
3.	Clarity of solution.	Test solution A and Test solution B show the same clarity as that of water, or their opalescence is not more pronounced than that of reference suspension A.
4.	Color of solution.	The test solution has the appearance of water or is not more intensely colored than the standard solution.
5.	Identification- (A) By Sp. gravity. (B) By IR.	It complies the test for specific gravity. The IR Spectrum of the test exhibits maxima only at the same wavelength as that of a similar preparation of Dehydrated Alcohol.
6.	Specific gravity.	Not more than 0.7962 at 15.56° C, Indicating not less than 99.2% of C ₂ H ₅ OH, by weight, corresponding to not less than 99.5% by volume at 15.56° C.
7.	Acidity or alkalinity.	The solution is colorless. On addition of 1.0 ml of 0.01 N Sodium hydroxide, to 20 ml alcohol, it should change to pink.
8.	Ultraviolet absorption.	At 240 nm absorbance is not more than 0.40 Between 250 nm and 260 nm maximum absorbance is not more than 0.30, Between 270 nm and 340 nm maximum absorbance is not more than 0.10, Between 235 nm and 340 nm the absorbance curves. Is smooth. (All requirements are in 5 cm cell).
9.	Volatile impurities by GC. Methanol Sum of content of acetaldehyde and acetal expressed as acetaldehyde Benzene Total of all other impurities	Not more than 200 ppm. Not more than 10 ppm. Not more than 2 ppm. Not more than 300 ppm.
10.	Limit of non-volatile residue	The weight of the residue does not exceed 2.5 mg/100 ml=25 ppm.

Specification No:-SCAPL-013

