



The Andhra Sugars Limited.

Table of Contents

ETHANOL.....	2
SPECIFICATIONS	3
Product Description	3
Technology	3
Packing.....	3
Applications.....	4
Advantages	4
Note	4
MATERIAL SAFETY DATA	5
Material Identification.....	5
Product use.....	5
Hazardous Ingredients.....	5
Physical and Chemical properties	6
Fire/Explosion Hazard data.....	6
Reactivity Data	7
Health Hazard Data	7
Preventive Measures	8
Emergency/First-Aid measures	9
Disclaimer.....	9



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ETHANOL



S No.	Characteristic	Description
1.	Chemical Name	Ethanol(absolute alcohol)
2.	Formula	C_2H_5OH
3.	CAS Registry No.	64-17-5
4.	IS15464	2004
5.	HSN	2207
6.	UN No.	1170



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SPECIFICATIONS

S No.	Specifications	
1.	Specific Gravity at 15.6°C/15.6°C	0.7961
2.	Ethanol Content, (% by vol.), at 15.6°C, Min	99.50
3.	Miscibility with water	Miscible
4.	Alkalinity	Nil
5.	Acidity as CH ₃ COOH, (% by weight), Max.	0.0050
6.	Residue on Evaporation, (% by Weight), Max.	0.0050
7.	Aldehyde Content as CH ₃ CHO, (gm/100ml), Max.	0.0060
8.	Water (% by vol.), at 20°C	0.50

Product Description

- Clear, Colorless liquid with a pleasant alcoholic odour.
- Volatile organic compound with boiling point of 78°C

Technology

- Ethanol is produced by Molecular sieve dehydration of Rectified Spirit (Industrial alcohol).
- The most modern technology of M/s. KATZEN INTERNATIONAL, U.S.A was adopted in the process, which was supplied through M/S ALFA LAVAL (I) LIMITED, PUNE.

Packing

- Bulk Lorry Tankers
- Barrels and Carboys



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Applications

- Drugs & Pharmaceutical Industry
- Organic Chemicals
- Solvent and extraction medium
- Blended with petrol, which is used as a fuel
- Cosmetics

Advantages

- We guarantee the product purity of 99.5 % to 99.8% V/V.
- The product has high purity and is free from impurity like Benzene / Cyclohexane.
- Quality Control Department is equipped with modern instruments for analysis of Ethanol as per customer requirement.

Note

We can also supply **Denatured Ethanol** by adding approved Denaturants as per customer's requirements. (Required Denaturant shall be supplied by the customer).



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MATERIAL SAFETY DATA

Material Identification

1.	Technical Name	Ethyl Alcohol
2.	Chemical Formula	C ₂ H ₅ OH
3.	CAS Registry No.	64-17-5
4.	UN No.	1170
5.	Hazard Class	3 (Flammable)
6.	Synonyms	Ethanol, Grain Alcohol
7.	Chemical Classification	Hazard Class
8.	Hazard Chem -Code	2SE
9.	Hazard Waste Id no.	-

Product use

Pure Ethyl Alcohol is used as solvent, chemical intermediate, an preservative in a wide variety of industries including drugs.

Hazardous Ingredients

Hazardous Ingredient	Ethyl Alcohol
Concentration	95%
UN No.	1170
LD ₅₀	LD ₅₀ (Oral, Rat)=5-15gr/kg



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Physical and Chemical properties

State	Liquid
Color	Colourless
Odour	Pleasant alcoholic odour
Molecular Weight	46
Freezing Point	-
Melting Point	-114°C
Specific gravity	0.789
Vapour pressure	-
Vapour density	1.59
Boiling Point	78°C
Water Solubility	Floats and mixes with water
pH	Neutral
Others	-

Fire/Explosion Hazard data

Flammability	Flammable
TOG Flammability	-
Flash Point	12.2°C
Auto ignition temperature	422.8°C
Hazardous combustion products	None
Explosive range	3.3 to 19
Sensitivity to chemical impact	-
Sensitivity to static discharge	-



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Reactivity Data

Chemical Stability	Stable
Reactivity	No reaction with water and common material , Reacts with Oxidizing agents
Incompatibility	Dangerous reaction products Reacts with varying degrees of violence with a wide range of oxidants includes silver nitrate.

Health Hazard Data

Route of entry	Inhalation, skin contact, ingestion
Permissible limits	TLV:1000 ppm
Lethal dose	-
Effects on chronic exposure/acute exposure	Continuous contact of the liquid, may result in irritation. The vapors may be dangerous if inhaled in large concentration. If taken large quantities would cause fatty infiltration of the liver and heart muscle, leptomenigitis and gastritis and results in general alcohol poisoning.
Sensitization to material	-
Synergistic materials	-



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Preventive Measures

Storage requirements	When used large quantities, U.G. Storage tank outside the building are preferred, smaller amounts may be stored outside the building in original shipping container.
Handling Methods	Tanks, Pipelines and other accessories are used in storage and transportation of Ethyl Alcohol should be bonded together and grounded, vats should be protected by Flame Arresters.
Leak/spill handling	Shut off all possible sources of ignition. Wear face shield goggles & gloves. Mop up with plenty of water and run to waste diluting greatly with running water. Ventilate area well to evaporate remaining liquid and dispel vapors.
Personal protective equipment	Rubber Gloves and Gum Boots, Goggles should be worn while handling
Waste disposal	-
Special shipping information	-



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Emergency/First-Aid measures

Fire extinguishments/Special procedure:

Extinguish with dry chemical powder or Alcohol Foam or CO₂

FIRST AID ANTIDOTES

Eyes/Skin: Affected area should be washed with running water gently for at least 15 minutes and get medical attention.

ADDITIONAL INFORMATION

Issue warning for high flammability. Disperse and flush

MANUFACTURER / SUPPLIER / CONSUMER DATA

THE ANDHRA SUGARS LIMITED

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Disclaimer

The information contained in this Safety Data Sheet is believed to be reliable but no representation, guarantee or warranties of any kind are made as its accuracy, suitability for a particular application or results to be obtained from them. It is however, ensured that the information contained in the MSDS is relevant to the product manufactured/handled or sold as the case may be by us.