



CERTIFICATE OF ANALYSIS

ETHANOL ABSOLUTE / ANHYDROUS 99.9% NATURAL SUGARCANE ALCOHOL

ETHANOL SOURCE : ILLOVO SUGAR

PRODUCT	ETHANOL 99.9% ABSOLUTE / ANHYDROUS
PRODUCT DESCRIPTION	ETHYL ALCOHOL OF 99.9% - UNDENATURED (UN)
MANUFACTURE DATE	Jun 2020
EXPIRY DATE	Jun 2021
BATCH NUMBER	PO-0011-ILS

UN -NO : 1170	NMT = not more than, NLT = not less than, ND = not detected, N/A = not applicable. Tests conducted as per : European Pharmacopeia & Illovo Sugar in-house test methods. All alcohol supplied is made from the fermentation of sugarcane molasses and is therefore classified as Natural Alcohol. All Alcohol produced by Illovo are molasses-based. Density & water recorded at point of loading
CAS NO : 64-17-5	
CLASS 3	
SG 0.789	
C2H6O	
PACKING GROUP II , F1	



TEST	SPECIFICATION	RESULTS	UNITS
Description	A clear, colourless, volatile liquid, free from foreign particles	Conforms	ND
Odour	Characteristic and spirituous	Conforms	
Solubility	Miscible with water, ether and chloroform	Conforms	
Identification	yellow precipitate is produced	Conforms	
Density @ 20C	NMT 0.7900	0.7895	g/ml
Acidity	NMT 30	Conforms	ppm
Water Content	NMT 0.08	0.03	%m/v
Non volatile impurities	NMT 25	6	ppm
Aldehydes	NMT 5	ND	ppm
Esters	NMT 30	ND	ppm
Methanol	NMT 50	ND	ppm
Higher Alcohols	NMT 5	ND	ppm
Cyclohexane	NMT 5	ND	ppm
Benzene	For information only	ND	ppm
UV Absorbance	WAVELENGTH ABSORBANCE	ND	N/A
	240nm 0.40 Maximum		
	250-260nm 0.30 Maximum		
	270-340nm 0.10 Maximum		
	The curve should be smooth between 235 & 340nm		
Assay	NLT 99.9	99.9	%v/v

RISK PHRASES
R11 HIGHLY FLAMMABLE
SAFETY PHRASES
S3/7 KEEP CONTAINER CLOSED IN COOL PLACE
S9 KEEP CONTAINER IN A WELL VENTILATED PLACE
S16 KEEP AWAY FROM SOURCE OF IGNITION
S23 DO NOT BREATHE IN VAPOUR
S36 WEAR SUITABLE PROTECTIVE CLOTHING