



# Specification

1.00983.0000 Ethanol absolute for analysis EMSURE® ACS,ISO,Reag. Ph Eur

	Specification	
Purity (GC)	≥ 99.9	%
Identity (IR)	conforms	
Appearance	conforms	
Color	≤ 10	Hazen
Solubility in water	conforms	
Acidity or alkalinity	≤ 30	ppm
Titration acid	≤ 0.0002	meq/g
Titration base	≤ 0.0002	meq/g
Density (d 20 °C/20 °C)	0.790 - 0.793	
UV absorption	conforms	
Aldehydes (as Acetaldehyd)	≤ 0.001	%
Fusel oils	conforms	
Substances reducing potassium permanganate (as O)	≤ 0.0002	%
Substances reducing permanganate (ACS)	conforms	
Carbonyl compounds (as CO)	≤ 0.003	%
Readily carbonizable substances	conforms	
Acetone, Isopropyl Alcohol (ACS)	conforms	
Acetone (GC)	≤ 0.001	%
Ethylmethylketone (GC)	≤ 0.02	%
Isoamyl alcohol (GC)	≤ 0.05	%
2-Propanol (GC)	≤ 0.01	%
Higher alcohols (GC)	≤ 0.01	%
Volatile impurities (GC) (Acetaldehyde and Acetal)	≤ 10	ppm
Volatile impurities (GC) (Benzene)	≤ 2	ppm
Volatile impurities (GC) (Methanol)	≤ 100	ppm
Volatile impurities (GC) (Total of other impurities)	≤ 300	ppm
Volatile impurities (GC) (disregard limit)	≤ 9	ppm
Chloride (Cl)	≤ 0.3	ppm
Nitrate (NO <sub>3</sub> )	≤ 0.3	ppm
Phosphate (PO <sub>4</sub> )	≤ 0.3	ppm
Sulfate (SO <sub>4</sub> )	≤ 0.3	ppm
Ag (Silver)	≤ 0.000002	%
Al (Aluminium)	≤ 0.00005	%
As (Arsenic)	≤ 0.000002	%
Au (Gold)	≤ 0.000002	%
Ba (Barium)	≤ 0.00001	%
Be (Beryllium)	≤ 0.000002	%
Bi (Bismuth)	≤ 0.000002	%
Ca (Calcium)	≤ 0.00005	%

# Specification

---

1.00983.0000 Ethanol absolute for analysis EMSURE® ACS,ISO,Reag. Ph Eur

---

Cd (Cadmium)	≤ 0.000005	%
Co (Cobalt)	≤ 0.000002	%
Cr (Chromium)	≤ 0.000002	%
Cu (Copper)	≤ 0.000002	%
Fe (Iron)	≤ 0.00001	%
Ga (Gallium)	≤ 0.000002	%
In (Indium)	≤ 0.000002	%
Li (Lithium)	≤ 0.000002	%
Mg (Magnesium)	≤ 0.00001	%
Mn (Manganese)	≤ 0.000002	%
Mo (Molybdenum)	≤ 0.000002	%
Ni (Nickel)	≤ 0.000002	%
Pb (Lead)	≤ 0.00001	%
Pt (Platinum)	≤ 0.000002	%
Sb (Antimony)	≤ 0.000002	%
Sn (Tin)	≤ 0.00001	%
Ti (Titanium)	≤ 0.000002	%
Tl (Thallium)	≤ 0.000002	%
V (Vanadium)	≤ 0.000002	%
Zn (Zinc)	≤ 0.00001	%
Zr (Zirconium)	≤ 0.000002	%
Evaporation residue	≤ 0.0005	%
Water	≤ 0.1	%

Jeannette David

Responsible laboratory manager quality control

This document has been produced electronically and is valid without a signature.