

CERTIFICATE OF ANALYSIS

Product: **Ethanol absolute**, reagent grade, ACS, ISO
ET0005

Batch 17712110
Quality release date 10/01/2017
Expiry date 1/2022

Analysis	Batch value	Specifications
assay (G.C.) (v/v)	99,99 %	min. 99,9 %
identity (IR-spectrum)	passes test	passes test
density (20°/4°)	0,7895	0,789 - 0,790
appearance	clear	clear
colour (Hazen)	3	max. 10
acidity	0,00006 meq/g	max. 0,0002 meq/g
solubility in water	passes test	passes test
acidity or alkalinity	< 0,0003 %	max. 0,0003 %
chlorides (Cl)	< 0,00003 %	max. 0,00003 %
nitrites (NO ₂)	< 0,00003 %	max. 0,00003 %
phosphates (as PO ₄)	< 0,00003 %	max. 0,00003 %
sulfates (SO ₄)	< 0,00003 %	max. 0,00003 %
aluminium (Al)	< 0,00005 %	max. 0,00005 %
antimony (Sb)	< 0,000002 %	max. 0,000002 %
arsenic (As)	< 0,000002 %	max. 0,000002 %
barium (Ba)	< 0,00001 %	max. 0,00001 %
beryllium (Be)	< 0,000002 %	max. 0,000002 %
bismuth (Bi)	< 0,000002 %	max. 0,000002 %
boron (B)	< 0,000002 %	max. 0,000002 %
cadmium (Cd)	< 0,000005 %	max. 0,000005 %
calcium (Ca)	< 0,00005 %	max. 0,00005 %
chromium (Cr)	< 0,000002 %	max. 0,000002 %
cobalt (Co)	< 0,000002 %	max. 0,000002 %
copper (Cu)	< 0,000002 %	max. 0,000002 %
gallium (Ga)	< 0,000002 %	max. 0,000002 %
gold (Au)	< 0,000002 %	max. 0,000002 %
indium (In)	< 0,000002 %	max. 0,000002 %
iron (Fe)	< 0,00001 %	max. 0,00001 %
lead (Pb)	< 0,00001 %	max. 0,00001 %
lithium (Li)	< 0,000002 %	max. 0,000002 %
magnesium (Mg)	< 0,00001 %	max. 0,00001 %
manganese (Mn)	< 0,000002 %	max. 0,000002 %
molybdenum (Mo)	< 0,000005 %	max. 0,000005 %
nickel (Ni)	< 0,000002 %	max. 0,000002 %
platinum (Pt)	< 0,000002 %	max. 0,000002 %
silver (Ag)	< 0,000002 %	max. 0,000002 %
thallium (Tl)	< 0,000002 %	max. 0,000002 %
tin (Sn)	< 0,00001 %	max. 0,00001 %

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titanium (Ti)	< 0,000002 %	max. 0,000002 %
vanadium (V)	< 0,000002 %	max. 0,000002 %
zinc (Zn)	< 0,00001 %	max. 0,00001 %
zirconium (Zr)	< 0,000002 %	max. 0,000002 %
formaldehyde	< 0,0005 %	max. 0,0005 %
furfural	passes test	passes test
fusel oil	passes test	passes test
acetaldehyde and acetal (G.C.)	< 0,001 %	max. 0,001 %
acetone (G.C.)	< 0,001 %	max. 0,001 %
isoamyl alcohol (G.C.)	< 0,05 %	max. 0,05 %
benzene (G.C.)	< 0,0002 %	max. 0,0002 %
methanol (G.C.)	< 0,01 %	max. 0,01 %
methylethylketone (G.C.)	< 0,02 %	max. 0,02 %
2-propanol (G.C.)	< 0,003 %	max. 0,003 %
higher alcohols (G.C.)	< 0,01 %	max. 0,01 %
aldehydes (as CH ₃ CHO)	< 0,001 %	max. 0,001 %
carbonyl compounds (as CO)	< 0,003 %	max. 0,003 %
substances darkened by H ₂ SO ₄	passes test	passes test
UV spectroscopy	passes test	passes test
substances reducing KMnO ₄	passes test	passes test
residue on evaporation	0,0001 %	max. 0,0005 %
water (v/v) (K.F.)	0,0150 %	max. 0,1 %

This certificate does not release the user from their control upon receipt of the goods
You can get a copy of any of our COA from our web site: www.scharlab.com

M. Canet
Laboratory Manager

