

**Scharlab S.L.**

Crtra.Polinya a Sentmenat, Km 8,2

08181 Sentmenat

☎ +34937456400

✉ helpdesk@scharlab.com

CERTIFICATE OF ANALYSIS**TO0085_21648511/1**

Product Toluene, Multisolvent® HPLC grade ACS ISO UV-VIS

Batch 21648511

TO0085

Quality release date 15/04/2021

Expiry date 04/2026

Analysis	Batch value	Specifications
Assay (G.C.)	99,90 %	≥ 99,9
Identity (IR-Spectrum)	passes test	passes test
Density (20°/4°)	0,8669 g/mL	0,864 - 0,868
Density (20°/20°)	0,8685 g/mL	0,865 - 0,869
Appearance	clear	clear
Colour (Hazen)	3	≤ 10
Acidity	0,00001 meq/g	≤ 0,0002
Alkalinity	< 0,0002 meq/g	≤ 0,0002
Chlorides (Cl)	< 0,00005 %	≤ 0,00005
Sulfates (SO4)	< 0,0001 %	≤ 0,0001
Aluminium (Al)	< 0,1 ppm	≤ 0,1
Antimony (Sb)	< 0,02 ppm	≤ 0,02
Arsenic (As)	< 0,02 ppm	≤ 0,02
Barium (Ba)	< 0,01 ppm	≤ 0,01
Beryllium (Be)	< 0,02 ppm	≤ 0,02
Bismuth (Bi)	< 0,1 ppm	≤ 0,1
Boron (B)	< 0,02 ppm	≤ 0,02
Cadmium (Cd)	< 0,01 ppm	≤ 0,01
Calcium (Ca)	< 0,3 ppm	≤ 0,3
Chromium (Cr)	< 0,02 ppm	≤ 0,02
Cobalt (Co)	< 0,02 ppm	≤ 0,02
Copper (Cu)	< 0,02 ppm	≤ 0,02
Gallium (Ga)	< 0,02 ppm	≤ 0,02
Gold (Au)	< 0,1 ppm	≤ 0,1
Indium (In)	< 0,02 ppm	≤ 0,02
Iron (Fe)	< 0,1 ppm	≤ 0,1
Lead (Pb)	< 0,1 ppm	≤ 0,1
Lithium (Li)	< 0,02 ppm	≤ 0,02
Magnesium (Mg)	< 0,1 ppm	≤ 0,1
Manganese (Mn)	< 0,01 ppm	≤ 0,01
Molybdenum (Mo)	< 0,05 ppm	≤ 0,05
Nickel (Ni)	< 0,02 ppm	≤ 0,02
Platinum (Pt) ppm	< 0,02 ppm	≤ 0,02
Silver (Ag)	< 0,02 ppm	≤ 0,02
Thallium (Tl)	< 0,05 ppm	≤ 0,05
Tin (Sn)	< 0,1 ppm	≤ 0,1
Titanium (Ti)	< 0,05 ppm	≤ 0,05
Vanadium (V)	< 0,05 ppm	≤ 0,05
Zinc (Zn)	< 0,01 ppm	≤ 0,01
Zirconium (Zr)	< 0,02 ppm	≤ 0,02
Benzene (G.C.)	0,0100 %	≤ 0,05

Results marked with # are out of specifications.

This certificate does not exempt the user from checking the results upon receipt of the goods.

Any copy of our CoA may be obtained from our website at www.scharlab.comMarta Martinez Casals
Laboratory Technician

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Sulfur compounds (as S)	< 0,003 %	≤ 0,003
Tiophene (C ₄ H ₄ S)	< 0,0001 %	≤ 0,0001
Substances darkened by H ₂ SO ₄	passes test	passes test
Residue on evaporation	0,0002 %	≤ 0,0002
Water (K.F.)	0,0065 %	≤ 0,02
UV spectroscopy in a 1,0 cm cell:		
min. transmission at 285 nm	14,52 %	≥ 10
min. transmission at 292 nm	60,07 %	≥ 50
min. transmission at 305 nm	85,28 %	≥ 80
min. transmission at 317 nm	93,38 %	≥ 90
min. transmission at 350 nm	99,24 %	≥ 98
max. absorbance at 285 nm	0,849 AU	≤ 1,000
max. absorbance at 292 nm	0,226 AU	≤ 0,301
max. absorbance at 305 nm	0,071 AU	≤ 0,097
max. absorbance at 317 nm	0,031 AU	≤ 0,046
max. absorbance at 350 nm	0,008 AU	≤ 0,009
Liquid chromatography suitability absorbance	passes test	passes test

Microfiltered through membranes of pore diameter 0,22 µm.

For laboratory use only.