



Material	28676.322
Material description	Toluene
Grade	AnalaR NORMAPUR ACS, Reag. Ph. Eur.
Lot	22H294014
Expires end of	2027-Aug-25
CAS Number	108-88-3
Molecular formula	C ₆ H ₅ CH ₃
Molecular mass	92,14

Characteristics	Specifications	Measured values
Assay (on anhydrous substance)	≥ 99.5 %	100.0 %
Appearance	Clear colourless liquid	Clear colourless liquid
Carbonisable substances	Passes test	Passes test
IR Spectrum	Passes test	Passes test
Substances coloured by H ₂ SO ₄	Passes test ACS/ISO	Passes test ACS/ISO
Acidity or alkalinity	≤ 0.0001 meq/g	≤ 0.0001 meq/g
Boiling point	109 - 112 °C	110 °C
Colouration	≤ 10 APHA	≤ 10 APHA
Density (20/4)	0.865 - 0.868	0.867
Density (20/20)	0.865 - 0.870	0.868
Refractive index (20°C)	1.496 - 1.498	1.497
Benzene	≤ 50 ppm	≤ 50 ppm
Evaporation residue	≤ 10 ppm	1 ppm
Thiophene	≤ 1 ppm	≤ 1 ppm
Total S (as SO ₄)	≤ 10 ppm	≤ 10 ppm
Water	≤ 0.03 %	< 0.01 %
Al (Aluminium)	≤ 0.05 ppm	≤ 0.05 ppm
B (Boron)	≤ 0.02 ppm	≤ 0.02 ppm
Ba (Barium)	≤ 0.02 ppm	≤ 0.02 ppm
Ca (Calcium)	≤ 0.2 ppm	≤ 0.2 ppm
Cd (Cadmium)	≤ 0.01 ppm	≤ 0.01 ppm
Co (Cobalt)	≤ 0.01 ppm	≤ 0.01 ppm
Cr (Chromium)	≤ 0.01 ppm	≤ 0.01 ppm
Cu (Copper)	≤ 0.01 ppm	≤ 0.01 ppm
Fe (Iron)	≤ 0.1 ppm	≤ 0.1 ppm
K (Potassium)	≤ 0.1 ppm	≤ 0.1 ppm
Mg (Magnesium)	≤ 0.05 ppm	≤ 0.05 ppm
Mn (Manganese)	≤ 0.01 ppm	≤ 0.01 ppm

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Characteristics	Specifications	Measured values
Na (Sodium)	≤ 0.5 ppm	≤ 0.5 ppm
Ni (Nickel)	≤ 0.01 ppm	≤ 0.01 ppm
Pb (Lead)	≤ 0.01 ppm	≤ 0.01 ppm
Sn (Tin)	≤ 0.05 ppm	≤ 0.05 ppm
Sr (Strontium)	≤ 0.02 ppm	≤ 0.02 ppm
Zn (Zinc)	≤ 0.01 ppm	≤ 0.01 ppm
Conforms to ACS	Passes test	Passes test
Conforms to Reag. Ph.Eur.	Passes test	Passes test

Signature

We certify that this batch conforms to the specifications listed above.

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

Isabelle Habay, Head of Laboratory - Briare
VWR International S.A.S.; Z.I. de Vaugereau; FR-45250
Briare; France