



PT. SMART-LAB INDONESIA

MANUFACTURER OF ANALYTICAL REAGENTS



CERTIFICATE OF ANALYSIS

Product Name	: Toluene	Molecular Weight	: 92.14 g/mol
Catalog No.	: A-1075	Batch No.	: 210121001
Grade	: Analytical Reagent	Manufacturing Date	: Jan 21, 2021
Formula	: C ₇ H ₈	Expire Date	: January, 2024
Cas No	: 108-88-3	Recommended for a plastic container for 6 month from the date of pouring (Expiry date corresponding to label)	

NO.	ITEM TEST	UNITS	SPECIFICATION	RESULT
1.	Appearance	–	Clear colorless liquid	Clear colorless liquid
2.	Assay (GC)	wt %	min 99.5	99.970
3.	Wt. Per ml at 20 °C	g/cm ³	0.860 – 0.867	0.867
4.	Colour	Hazen	max 10	< 10
5.	Refractive Index	n ²⁰ _D	1.494 – 1.497	1.495
6.	Water (H ₂ O)	wt %	max 0.03	0.0182
7.	Non-volatile matter	wt %	max 0.002	0.0018
8.	Acidity (HCl)	wt %	max 0.0004	0.00036
9.	Alkalinity (NH ₃)	wt %	max 0.0002	0.00012
10.	Benzene (C ₆ H ₆)	wt %	max 0.2	NIL
11.	Copper (Cu)	wt %	max 0.000002	< 0.000002
12.	Iron (Fe)	wt %	max 0.00001	< 0.00001
13.	Lead (Pb)	wt %	max 0.000005	< 0.000005
14.	Organic Impurities (acid wash)	–	Passes Test	Passes Test
15.	Sulphur Compounds (S)	wt %	max 0.0003	< 0.0003
16.	Thiophen homologues (C ₄ H ₄ S)	wt %	max 0.0002	< 0.0002

Result : The above product corresponds to AR Grade

Reference or standard of product specification to Analar standard specification

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Head QC