

PT. SMART LAB INDONESIA

MANUFACTURER OF ANALYTICAL REAGENTS

F/QCL/009 Rev.02

CERTIFICATE OF ANALYSIS

Product Name : tri-Sodium Citrate Dihydrate AR

Mol. Formula : $C_6H_5Na_3O_7 \cdot 2H_2O$

Mol. Weight : 294.10 g/mol

Catalog No. : A-3198

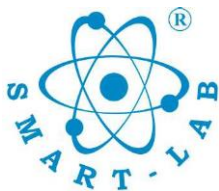
Batch No. : Sample COA

Cas No : 6132-04-3

Shelf Life : 60 Months

NO.	TESTS	UNITS	SPECIFICATIONS	RESULTS
1.	Appearance	–	White crystalline powder	White crystalline powder
2.	Assay (HClO ₄ titration)	wt %	min 99.0	99.762
3.	Identity	–	Passes test	Passes test
4.	Appearance of solution (100 g/L)	–	Clear & colourless	Clear & colourless
5.	pH (5% solution at 25 oC)	pH	7.5 – 9.0	8.117
6.	Insoluble matter	wt %	max 0.005	0.0036
7.	Acidity or alkalinity	–	passes test	Passes test
8.	Chloride (Cl)	wt %	max 0.001	0.00055
9.	Sulphate (SO ₄)	wt %	max 0.004	0.0039
10.	Phosphate (PO ₄)	wt %	max 0.002	0.00092
11.	Total Nitrogen (N)	wt %	max 0.001	< 0.001
12.	Heavy metals (as Pb)	wt %	max 0.0005	0.00037
13.	Iron (Fe)	wt %	max 0.0005	0.000046
14.	Ammonium (NH ₄)	wt %	max 0.003	< 0.003
15.	Calcium (Ca)	wt %	max 0.005	0.0016
16.	Oxalate (as C ₂ H ₂ O ₄)	wt %	max 0.01	< 0.01
17.	Tartrate (C ₄ H ₄ O ₆)	–	passes test	Passes test
17.	Readily Carbonisable substance	–	passes test	Passes test
18.	Water (KF)	wt %	11.0 – 13.0	12.33

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008



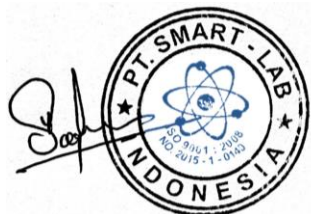
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Result: The above product corresponds to AR Grade

Reference or standard of product specification to Analar standard and ACS specification



Yuvraj Sagvekar
Manager QC

COA SAMPLE