

Certificate Of Analysis

Product Name : Caffeine Anhydrous 99 % AR

Catalog Number : O-5295

Batch Number : 5295-00000000

CAS Number : 58-08-2

Molecular Weight : 194.19 g/mol

Mol. Formula : $C_8H_{10}N_4O_2$

Expire Date : 60 months



No	Test	Specifications	Results
1	Appearance	Silky white crystals or crystalline powder ; odourless sublimates readily	White crystalline powder
2	Assay (on dried basis)	99.0 - 101.5 %	99.770%
3	Solubility	Sparingly soluble in water, freely soluble in boiling water, slightly soluble in ethanol (96 %). It dissolves in concentrated solutions of alkali benzoates or salicylates	complies
4	Identification	to comply IP, BP test	complies
5	Appearance of solution	to comply IP, BP test	complies
6	Melting point	235 - 237 °C	236.1 °C
7	Insoluble matter in water	max 0.005 %	0.0028%
8	Acidity or alkalinity	to comply IP, BP test	complies
9	Related substances	to comply IP, BP test	complies
10	Sulphate (SO ₄)	max 0.05 %	0.0058%
11	Heavy metals (as Pb)	max 0.002 %	< 0.0005 %
12	Loss on drying (at 105°C; for 1 hrs)	max 0.5 %	0.346%
13	Sulphated ash	max 0.1 %	0.078%
14	Copper (Cu)	max 0.0002 %	0.0000064%
15	Iron (Fe)	max 0.0002 %	0.00009%
16	Lead (Pb)	max 0.0002 %	Not detected
17	Zinc (Zn)	max 0.0002 %	Not detected
18	Theobromine (C ₇ H ₈ N ₄ O ₂)	max 0.2 %	Not detected

Corresponds to AR / ACS Grade

LABOTIQ In-house product specification, referenced to Analar standard and ACS specification



SUDIRO S.Si.
Manager QC