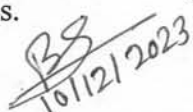


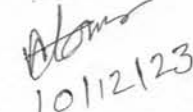
CERTIFICATE OF ANALYSIS


Product Name	: Theobromine	A. R. Number	: AGPL/QC/IM/23/033
Batch Number	: AGPL/TBR/202312001	Date of Release	: 10/12/2023
Date of Manufacturing	: December-2023	Retest Date	: November-2024

Sr. No.	Test	Specification	Result
1	Characters:		
I	i. Appearance	A white or almost white powder.	Complies
II	ii. Solubility	Very slightly soluble in water and in ethanol, slightly soluble in ammonia.	Complies
2	Identification:		
I	Test A : IR	The infra-red absorption spectrum should be concordant with that of Theobromine working standard or reference standard.	Complies
II	Test B : Colour Test	A white, crystalline precipitate should be formed.	Complies
III	Test C: Xanthis Test	It gives the reaction of Xanthis.	Complies
3	Acidity (ml)	NMT 0.2 ml of 0.01M sodium hydroxide is required to change the colour of indicator to blue.	0.15 ML
4	Loss on drying @105°C for constant weight. (% w/w)	Not more than 0.5	0.38 %
5	Sulfated ash (% w/w)	Not more than 0.1	0.068 %
6	Assay on dry basis by Titration (% w/w)	99.0 – 101.0	100.29 %
7	Related substance by HPLC (%)		
I	7-Methylxanthine	NMT 0.2	Not Detected
II	3-Methylxanthine	NMT 0.2	Not Detected
III	Theophylline	NMT 0.2	Not Detected
IV	Caffeine	NMT 0.2	0.12 %
V	Single max. unknown imp.	NMT 0.2	0.034 %
VI	Total impurities	NMT 1.5	0.15 %
VII	Purity by HPLC	NLT 98.5	99.79 %
8	Readily Carbonizable Substances	Not more intensely colour than reference solution Y ₅	Complies

Remarks: Theobromine Comply / does not comply with respect to above mentioned test as per **III** specifications.


 10/12/2023
Analysed By
Sign & Date


 10/12/23
Checked By
Sign & Date


 10/12/2023
Approved By
Sign & Date