

## Certificate of Analysis

Product Name	S-ADENOSYL L-METHIONINE	Mfg. Date	2019.10.02
Batch No.	KNG20191002	Testing Date	2019.10.02
Quantity	50KG	Exp. Date	2021.10.01

Items		Specification	Results
Appearance		White to off-white powder	Complies
Identification	Infrared	Conforms to the Reference Spectrum	Complies
	HPLC	The retention time of the major peak corresponds to the reference sample	Complies
Water(K.F)		≤3.0%	1.11%
Sulphated Ash		≤0.5%	Complies
pH (5% Aqueous Solution)		1.0-2.0	1.3
S, S-Isomer(HPLC)		≥75.0%	84.1%
SAM-e ION(HPLC)		49.5~54.7%	52.1%
P-Toluenesulfonic Acid		21.0~24.0%	22.0%
Sulfate(SO <sub>4</sub> )(HPLC)		23.5-26.5%	25.0%
S-Adenosyl-L-methionine		95.0~103%	98.96%
Related Substances(HPLC):			
-S-Adenosyl-L-Homocysteine		≤1.0%	0.1%
-Adenine		≤1.0%	0.1%
-Methylthioadenosine		≤1.5%	0.12%
-Adenosine		≤1.0%	0.1%
-Total Impurities		≤3.5%	0.74%
Heavy Metals		≤10ppm	Complies
Lead		≤3ppm	Complies
Mercury		≤0.1ppm	Complies
Arsenic		≤2ppm	Complies
Cadmium		≤1ppm	Complies
Microbiology			
Total Aerobic Count		≤1000cfu/g	Complies
Yeast & Mold		≤100cfu/g	Complies
E. Coli		Absent/10g	Complies
S. Aureus		Absent/10g	Complies
Salmonella		Absent/10g	Complies
Conclusion		Conform with USP37 standard.	

**Storage** Store in cool & dry place, keep away from strong light and heat.

**Shelf Life** 2 years when properly stored.

**Approved By:** QA Manager Liu Guiqi