



ASCORBIC ACID

CERTIFICATE OF ANALYSIS

Productcode : 0408050
Lot No. : TL01711113
Analysis No. : 06198784

Test	Result	Limits / Specifications	Dimension / Units
Appearance visual	powder	powder	
Colour visual	white	white slightly yellow	
Solution in Water (c = 5) visual	clear and colourless	clear and colourless	
pH (c = 5 in water) of 5% solution in water	2.4	2.2 to 2.5	
Specific Rotation(c=10 in Water) (589nm, 20 deg.C, c=10)	20.9	20.5 to 21.5	0
Loss on Drying 105 deg, 4 hours	0.02	0.0 to 0.1	%
Identity IR, pH and Reduction of Cupric Tartrate	corresponds*	complies	
Sulfated Ash sulfated ash	corresponds*	max. 0.1	%
Heavy Metals colourimetric comparison to Pb standard	corresponds*	max. 10	ppm
Iron Atomic Absorption	corresponds*	max. 2	ppm
Copper Atomic Absorption	corresponds*	max. 5	ppm
Lead Atomic Absorption	corresponds*	max. 2	ppm
Zinc Atomic Absorption	corresponds*	max. 25	ppm
Arsenic colourimetric comparison to As standard	corresponds*	max. 3	ppm
Mercury Atomic Absorption	corresponds*	max. 1	ppm
Oxalic Acid turbidimetric comparison to standard	corresponds*	max. 0.2	%
Assay iodine titration	99.8	99.0 to 100.5	%
Sieve Test through USP 20 (850u) air jet sieve	100	100 to 100	%



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through USP 100 (150u) air jet sieve	7 ✓	0 to 70	%
through USP 200(75u) air jet sieve	1 ✓	0 to 20	%
Ethanol headspace GC	corresponds*	max. 120	ppm
Methanol headspace GC	corresponds*	max. 60	ppm
Related Impurities			
Impurity C by HPLC	0.04 ✓	max. 0.15	%
Impurity D by HPLC	0.01 ✓	max. 0.15	%
Unspecified Impurities >0.10 percent by HPLC	not present	not present	
Total Other than C and D by HPLC	0.10 ✓	max. 0.2	%

*) checked at regular intervals

This lot was analysed and released by our authorized Quality Control Department and was found to meet the specifications as given above.

The product meets all requirements of the following valid compendia when tested accordingly:

USP + FCC + Ph. Eur.

DSM Nutritional Products (UK) Ltd.
The Quality Assurance Manager

Young Scott