

Certificate 4131957 The Dow Chemical Company

Date: 09/02/2008 Certificate of Analysis Shipped: U9/02/2008

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Material: METHOCEL\* K4M Premium CR

Hydroxypropyl Methylcellulose

Batch: WH19012N31

WH19012N33

WH19012N35

WH21012N32 Mfgd: 08/19/2008

08/19/2008 08/19/2008

08/21/2008 Retest Date: 08/18/2013

08/18/2013 08/18/2013 08/20/2013

Ship from: THE DOW CHEMICAL COMPANY MIDLAND MI UNITED STATES

It is hereby certified, the material indicated above has been manufactured in accordance with the FDA's Current Good Manufacturing Practices, Kosher guidelines, was inspected and tested in accordance with the conditions and requirements of Current USP for Hypromellose and unless agreed otherwise, conforms in all respects to the specification relevant thereto.

	Results		Limits	
Feature	Units	WH21012N32	Minimum	Maximum
		5,176	•	4,970
*** Warning: Result(s) ou	t of sp	ecification	***	
Loss on Drying	8	3.1	<u> </u>	5.0
Residue on Ignition	%	0.4		1.5
Ash, Sulfated	%	0.4		1.5
pH, 2% in Water	-	5.6	5.0	8.0
Appearance, Opalescence		О.К.		
Appearance, Solution Color		O.K.		
Assay, Methoxyl	%	23.2	19.0	24.0
Assay, Hydroxypropoxyl	%	8.1	7.0	12.0
Particle Size, thru 40 U.S. Std Sieve	. %	100.0	99.0	
Particle Size, thru 100 U.S. Std Siev		96	90	
Particle Size, thru 230 U.S. Std Siev	· %	36.2	80.0	
*** Warning: Result(s) ou	t of sp	ecification	***	

Typical Properties: This batch, based on audit testing and process control, complies with the following additional specification requirements:

Harmonized Identification Tests: Passes

Residual Solvents: Passes

Heavy Metals as PB: Not more than 20 ppm

Microbiological Limits: Passes

Batch (Lot) Number manufactured location: 2N = Midland, MI; 24 = Plaquemine, LA For inquiries please contact Customer Service or local sales.

English: 800-232-2436 French: 800-565-1255

<sup>\*</sup> Trademark of The Dow Chemical Company