

Kalchem International

Chemicals & Compounding Supplies

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THE DOW CHEMICAL COMPANY		UNIVAR USA INC MORRISVILLE BRANCH 200 DEAN SIEVERS PL. MORRISVILLE PA 19067-3700			
		Ship From: BAY CITY Whse BAY CITY Michigan, United States			
Certificate of Analysis		Customer Information			
Product Number	00000016624	Customer Name	UNIVAR USA INC		
Product Name	METHOCEL™ K100M Premium Hydroxypropyl Methylcellulose	Customer PO number	MV-646858		
Delivery No.	805507406 /000010	Customer Product Code	00016624		
Order Number	103529040	PC# 299280			
Shipping Units	42.000 BAG	Container ID	CNWY		
Date Shipped	2015-07-01 (YYYY-MM-DD)				
Shipment No.	25518042				
Batch Number	D180F58001				
Retest Date	2017-05-07 (YYYY-MM-DD)				
Manufacturing Date	2015-05-08 (YYYY-MM-DD)				
Quantity	42.000 BAG				
Net Weight	2100.037 LB / 952.560 KG				
Manufacturing Plant	MIDLAND Methocel				
Country of Origin	US				
Country of Origin Name	United States				
It is hereby certified the material indicated above has been manufactured in accordance with the FDA cGMPs, Kosher guidelines, was inspected and tested in accordance with the conditions and the requirements of current USP, EP and JP for Hypromellose as well as the current specific purity criteria for the food additive Hydroxypropyl Methyl Cellulose (E464) and unless agreed otherwise conforms in all respects to the specification relevant thereto.					
Test	Unit	Lower Limit	Upper Limit	Value	Method
Apparent Viscosity BROOKFIELD 2% IN WATER, @ 20DEGC	mPa.s	75000	140000	85998	Current USP/EP/JP
Loss on Drying as packaged	%		5.0	2.5	Current USP/EP/JP
Residue on Ignition	%		1.5	0.9	Current USP/JP
Ash, Sulfated	%		1.5	0.9	Current EP
pH, 2% in Water		5.0	8.0	6.4	Current USP/EP/JP
Assay, Methoxyl	%	19.0	24.0	23.0	Current USP/EP/JP
Assay, Hydroxypropoxyl	%	7.0	12.0	10.5	Current USP/EP/JP
Appearance Opalescence		-	-	Pass	Current EP

Kalchem International, Inc
 224 South Main Street - Lindsay, OK 73052
 Toll Free 888-298-9905 | FAX: 405-756-2373

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Appearance Solution Color	- - Pass Current EP
This batch, based on audit testing and process control, is certified to be NMT 20 ppm heavy metals (as Pb) and also meets all specification requirements for harmonized identification tests, residual solvents and microbiological limits.	
<p><i>Shari Workentine</i></p> <p>Shari Workentine Dow Pharma & Food Solutions Quality System Specialist</p> <p>For inquiries please contact Customer Service or local sales ® " Trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow</p>	

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