


Kalchem International

Chemicals & Compounding Supplies

 <p>THE DOW CHEMICAL COMPANY</p>		UNIVAR USA INC GRAND RAPIDS BH 2940 STAFFORD AVE SW WYOMING MI 49548-1037			
		Ship From: NITRO Whse NITRO United States			
Certificate of Analysis		Customer Information			
Product Number	00000166958	Customer Name	UNIVAR USA INC		
Product Name	CARBOWAX™ SENTRY™ POLYETHYLENE GLYCOL 1450 FLAKE NF, FCC GRADE	Customer PO number	GU-067457		
Delivery No.	804532709 / 000020	Customer Product Code	00166958		
Order Number	102882618	Container ID	BKC		
Date Shipped	2015-02-20 (YYYY-MM-DD)	Specification Number	00000085554		
Shipment No.	24662196				
Batch Number	D684F24PB2				
Retest Date	2018-02-04 (YYYY-MM-DD)				
Manufacturing Date	2015-02-04 (YYYY-MM-DD)				
It is hereby certified that the material indicated above has been manufactured in accordance with current Joint International Pharmaceutical Excipients Council (IPEC) Pharmaceutical Quality Group (PQG) Good Manufacturing Practices Guide for Pharmaceutical Excipients, Kosher guidelines, was inspected and tested in accordance with the conditions and the requirements of current monographs for National Formulary - Polyethylene Glycols; Food Chemical Codex - Polyethylene Glycols.					
Test	Unit	Lower Limit	Upper Limit	Value	Method
Molecular Weight	MWUnit	1305	1595	1487	1B-ZMETH-1.3
pH at 25degC 5% aqueous solution		4.5	7.5	6.0	1B-ZMETH-16.2
Water	WT%	-	1.00	0.10	1B-ZMETH-24
1,4-Dioxane	ppm wt	-	10	0	1B-ZMETH-5.1
Ethylene Oxide	ppm wt	-	1.00	0.28	1B-ZMETH-5.1
Color, Pt-Co 25% aqueous solution		-	18	1	1B-ZMETH-3.8
Visc @ 210degF, cSt	cSt	25.0	32.0	28.5	1B-ZMETH-23
Viscosity @ 20degC 50% wt aqueous solution	cSt	30	44	38	1B-ZMETH-23
Compl&Color of sol. not more than slightly hazy		-	-	Pass	DOWM 101924-E01A
Although every batch may not be tested, this material meets the following: Free EO < 1ppm by wt; Heavy Metals - 5 ppm by wt, max.; Residue on Ignition- 0.1 wt%, max.; Total EG/DEG - 0.2 wt%, max. This product contains BHT, nominal concentration 100 ppm					
Original Manufacture/Location of Manufacture: 55/S7=The Dow Chemical Company, St. Charles Operations, E-Park Plant, 355 Highway 3142,					

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