

 DOW FRANCE S.A.S.		UNIVAR SOLUTIONS SAS ZAC DES HAULDRES/Z PARISUD II BOULEVARD D'ESPAGNE 77127 LIEUSAIN Ship From: Antwerp H Essers 1097 Whse Wilrijk Belgium			
Certificate of Analysis		Customer Information			
Product Number	00099157237	Customer Name	UNIVAR SOLUTIONS SAS		
Product Name	CARBOWAX™ SENTRY™ Polyethylene Glycol 8000 NF Powder (Inhibited); Macrogol 8000 Ph. Eur.	Customer PO number	4500757211		
Delivery No.	827120936 / 000010	Customer Product Code	000000000002028827		
Order Number	115834047	Container ID	OJ64YP		
Date Shipped	2024-02-28 (YYYY-MM-DD)	Vehicle#	84blz5		
Shipment No.	44162937	Specification Number	000000085592		
Batch Number		D684NBREB1			
Retest Date		2026-11-27 (YYYY-MM-DD)			
Manufacturing Date		2023-11-27 (YYYY-MM-DD)			
Manufacturing Plant		Taft Ethoxylates Park			
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 was inspected and tested in accordance with the conditions and the requirements of current monographs for National Formulary - Polyethylene Glycols; European Pharmacopoeia - MACROGOLS. The manufacturing facility and this product have been Kosher certified.					
Test	Unit	Lower Limit	Upper Limit	Value	Method
Mole Weight, Average		7000	9000	8834	Current NF
Ethylene Oxide	ppm	-	10	0	Current NF
1,4-Dioxane	ppm	-	10	0	Current NF
pH		4,5	7,5	6,9	Current NF
25degC 5% aqueous solution					
Viscosity	cSt	500	900	858	Current NF
210degF					
Q Comp & Color of Soln	-	-	-	Pass	Current NF
5g/50mL-less than slight haze					
Q Residue on Ignition	-	-	-	Pass	Current USP
less than 0.1%					
Q Sulphated Ash	-	-	-	Pass	Current USP
less than 0.2%					
Appearance	-	-	-	Pass	Current EP
white solidwith a waxy appearance					
Identification: a	-	-	-	Pass	Current EP

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Acidity	-	-	-	Pass	Current EP
less than 0.1mL of 0.1M NaOH					
Viscosity	mPa.s	260	510	459	Current EP
20degC 50% AQ					
Hydroxyl Value		12	16	13	Current EP
Ethylene Oxide	ppm	-	1	0	Current EP
1,4-Dioxane	ppm	-	10	0	Current EP
Water	WT%	-	1,0	0,1	Current EP
Q Identification: b, c	-	-	-	Pass	Current EP
Q Appearance of Soln	-	-	-	Pass	Current EP
Q Freezing Point	-	-	-	Pass	Current EP
between 55 - 62 deg C					
Q Reducing Substances	-	-	-	Pass	Current EP
Q Formaldehyde	-	-	-	Pass	Current EP
less than 15 ppm					
3 Acetic Acid	-	-	-	Pass	Current EP
less than 5000 ppm					
Appearance	-	-	-	Pass	DOWM 101924
Neat					
BHT	-	-	-	Pass	DOWM 102271
nominal 100 ppm					
Color, Pt-Co	-	-	18	14	ASTM D5386
25% aqueous solution					
Diethylene Glycol	ppm	-	300	< 21	DOWM 102369
1 Ethylene Glycol	ppm	-	300	< 27	DOWM 102369
1 1,4-Dioxane	ppm	-	10	0	DOWM 102475
Ethylene Oxide	ppm	-	1	0	DOWM 102475
1:Residual Solvents - Class 2 Solvent 3:Residual Solvents - Class 3 Solvent Q:Analyzed Quarterly					



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ZAC DES HAULDRES/Z PARISUD II
BOULEVARD D'ESPAGNE
77127 LIEUSAIN

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Wilrijk
Belgium

A handwritten signature in black ink, appearing to read "Kyle Levy".

Kyle Levy
Quality Coordinator

Original Manufacture/Location of Manufacture: D684=The Dow Chemical
Company, St. Charles Operations, E-Park Plant, 355 Highway 3142,
Hahnville, LA 70057 (previously known as Taft), Phone: 800-331-6451

For inquiries please contact Customer Service or local sales

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