

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2026-06-06 10:03:22  
Date of Next Testing: 2029-06-05 10:03:22  
Product Name: **Kolliphor® P 188**  
CAS Number: 9003-11-6  
Specifications & Purity:  
Lot #: E2628049  
SKU #: K434430  
Version: **1**  
Analysis #: **638231**  
Storage Temperature: Room temperature

Parameter	Limit Values	Result
Water by Karl Fischer	0-0.75 (%)	0.24000 %
Average Mn	7680-9510 (g/mol)	8976.00000 g/mol
pH Value (1:40)	6.0-7.5	6.70000
Cloud Point, 10% solution	≥100 (°C)	105.00000 °C
APHA Color (50:50 in MeOH)	≤100	26.00000
Ethyleneoxide	0-1 (ppm)	0.50000 ppm
Propylene Oxide	0-5 (ppm)	0.60000 ppm
1,4 Dioxane	0-5 (ppm)	0.30000 ppm
Congealing Point	46-56 (°C)	49.00000 °C
Butylhydroxytoluene	50-125 (ppm)	112.00000 ppm
Arsenic(As)	0-2 (ppm)	1.05000 ppm
Oxyethylene content Weight	79.9-83.7 (%)	80.50000 %
Residue on Ignition	0-0.3 (%)	0.15000 %
Heavy metals	0-20 (ppm)	10.00000 ppm
Ethyleneglycol (EG)	≤620 (ppm)	50.12000 ppm
Ash	0-0.4 (%)	0.20000 %
pH Value (1:10)	5.0-7.5	7.00000
Sum of EG and DEG(≤0.25%)	Pass	Pass
Identification (IR)	Passes test	Passes test
Solution(Pass, Clear and colorless)	pass	Pass
Acid	Pass	Pass



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A handwritten signature in black ink that reads "John Su". The signature is written in a cursive, flowing style.

John Su  
QA & QC Manager