

CERTIFICATE OF ANALYSIS

Product Name:	Poloxamer 407	Manufacture Date:	Nov. 02, 2022
Batch Number:	LYPH221102	Certificate Date:	Nov. 04, 2022
Batch Quantity:	6480 Kg	Expiration Date	Nov. 01, 2024

Items	Specification	Results
Identification (IR)	Matches standard scan	Pass
Appearance of solution	Less than BY7	Pass
Clarity and color of solution	Clear and colorless	pass
Acid	Red solution	Pass
Ph value(25g/L in water)	5.0-7.5	6.8
Ph value(100g/L in water)	5.0-7.5	6.9
Average molecular weight	9840g/mol~14600g/mol	11688g/mol
Oxyethylene	71.5%~74.9%	72.5%
Total ash	≤0.4%	<0.4%
Residue on ignition	≤0.30%	<0.3%
Unsaturation	0.031mEq/G~0.065mEq/G	0.041mEq/G
Water	≤0.75%	0.10%
Heavy metals	≤20	<20
BHT stabilizer	50ppm~125ppm	100ppm
Congealing point	50°C~62°C	54°C
APHA Color(50:50 in MeOH)	≤120	80
Cloud point, 10% solution	≥100°C	>100°C
Residual solvent	Meets USP requirements	Pass
Sum of EG and DEG	<0.25wt%	Pass
1,4 dioxane	≤5.0ppm	<1ppm
Ethylene oxide	≤1.0ppm	<1ppm
Propylene oxide	≤5.0ppm	<1ppm
Arsenic	≤2ppm	<2ppm

Conclusion	Conform with current USP-NF, EP and JPE requirements.		
Packing description	Sealed export grade drum & double of sealed plastic bag.		
Storage	Store in cool & dry place, keep away from strong light and heat.		
Shelf life	2 years when properly stored		

Quality Assurance Officer. 董文华

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