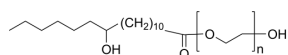


Certificate of Analysis

Product Name:	Solutol HS-15
Cat. No.:	CS-0040442
CAS No.:	61909-81-7
Batch No.:	41648
Chemical Name:	Poly(oxy-1,2-ethanediyl), α -(12-hydroxy-1-oxooctadecyl)- ω -hydroxy-

PHYSICAL AND CHEMICAL PROPERTIES

Molecular Formula:	$(C_2H_4O)_n C_{18}H_{36}O_3$
Storage:	2-8°C, sealed storage, away from moisture
Chemical Structure:	



ANALYTICAL DATA

Appearance:	Colorless to off-white (Oil)
Free macrogols:	32.6g/100g
pH-Value:	6.3
Acid Value:	<1 mg KOH/g
Hydroxyl Value:	104mg KOH/g
Iodine Value:	<2g Iodine/100g
Peroxide Value:	<3 meq/kg
Saponification Value:	59mg KOH/g
Water:	0.1g/100g
Nickel:	<1mg/kg
Heavy Metals:	<10 mg/kg
Ethylene Oxide:	<1 mg/kg
1,4-dioxane:	<10mg/kg
Diethylene glycol:	<100mg/kg
Residual solvents ethylene glycol:	<50mg/kg
Residual solvents acetic acid:	0.5g/100g
Total ash:	0.2g/100g
Freezing Point:	25 degree C
Total aerobic microbial count:	<10 CUF/g
Total combined yeasts/moulds count:	<10 CUF/g

Conclusion:

The product has been tested and complies with the given specifications.

Caution: Product has not been fully validated for medical applications. For research use only.

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