

**CASTOR OIL  
CERTIFICATE OF ANALYSIS  
LOT#2311**

CHARACTERISTICS		SPECIFICATIONS	METHOD
Appearance @25°C	Pass	Brilliantly Clear	Visual
Odor	Pass	Very slight, characteristic	Sensory
Free Fatty Acid/10g	0.42mL of 0.10N Naoh	Not more than 3.5mL of 0.10N Naoh	USP <401>
Specific gravity 25°C	0.961	0.957-0.961	USP <841>
Saponification value	180	176-182	USP <401>
Heavy Metals Method II %	Pass	Max. 0.001	USP <231>
Distinction from other fixed oils	Pass	Conforms	USP <831>
Iodine value	86	83-88	USP <401>
Residual solvents	Pass	No class 1, 2, 3 or other solvents present.	
Hydroxyl value	163	160-168	USP <401>

This oil complies to the current USP Monograph.

The Chemistry  
PO# 04292013198  
Item# CastorOil  
1 x 440.9 Lb Drum

Manufacture Date: 04/13

Expiration/Retest Date: 2 Years +\*Expiration date is based on storage in sealed unopened drums at room temperature (approx. 68°F) under nitrogen blanket.

\*Periodic retesting recommended.