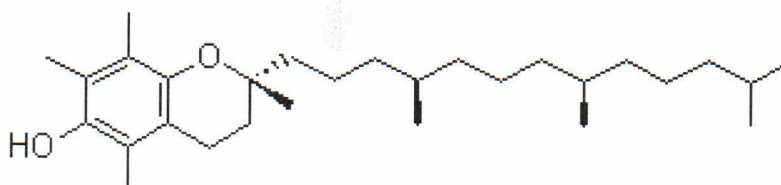


Batch no VM90240801
 Mf date Aug 18 2024
 Retest Aug 17 2026

Molecular Structure



Molecular Formula $C_{29}H_{50}O_2$
 Molecular Weight 430.71
 CAS Registry Number 59-02-9

Nov 29 2024

Tests	Specifications	Results
Appearance	Pale yellow to brownish red, clear oily liquid	Conforms
Odor	Nearly odorless	Conforms
Identification	Chemical reaction, GC	Positive
Acidity	≤ 1.0 mL	0.12 mL
Optical rotation $[\alpha]^{25}_D$	$\geq +20^\circ$	$+20.6^\circ$
Residue on ignition	$\leq 0.1\%$	Conforms
Specific gravity (25°C)	0.92 ~ 0.96 g/cm ³	Conforms
Lead	≤ 1.0 ppm	Conforms
Arsenic	≤ 1.0 ppm	Conforms
Cadmium	≤ 1.0 ppm	Conforms
Mercury	≤ 0.1 ppm	Conforms
B(a)p	≤ 2.0 ppb	Conforms
PAH ₄	≤ 10.0 ppb	Conforms
Microbiological	Total aerobic Microbial count ≤ 1000 cfu/g	Conforms
	Total yeasts & molds count ≤ 100 cfu/g	Conforms
	E. coli Negative/10g	Negative
Assay	Total tocopherols $\geq 90\%$	90.11%
	D-alpha tocopherol $< 20.0\%$	13.89%
	D-beta tocopherol $< 10.0\%$	1.91%
	D-gamma tocopherol 50.0 ~ 70.0%	63.31%
	D-delta tocopherol 10.0 ~ 30.0%	20.89%
	D-($\beta + \gamma + \delta$) tocopherols $\geq 80.0\%$	86.11%

Packaging and storage	Preserve in tight containers, protected from light and in cool, dry place. Use it immediately once opened.
Conclusion	Material complies with USP-NF2024