

# Supplementary Materials: Tuning the Transdermal Delivery of Hydroquinone upon Formulation with Novel Permeation Enhancers

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**Table S1.** Virgin olive oil characteristics. All physicochemical tests were conformed with Pharmacopeia requirements.

Test	Result	Limit
Acidity	0.1 %	≤ 0.8
Peroxide index	5.8 meq O <sub>2</sub> /kg	≤ 20
Humidity and volatile substances	0.09 %	≤ 0.2
Insoluble impurities	< 0.05 %	≤ 0.1
Refractive index	1.468	1.4677–1.4705
Ethyl esters	< 10	Max 35
Content of total sterols	1347 mg/kg	≥ 1000
Cholesterol	0.1 %	≤ 0.5
Miristic acid (C14:0)	< 0.01 %	≤ 0.03

**Table S2.** Nourivan® characteristics. Composition: Purified water, cetearyl alcohol, polysorbate 60, C13-C16 isoparaffin, C12-C14 isoparaffin, C13-C15 alkane, glyceryl stearate, polyacrylate 13, polyisobutene, polysorbate 20, polyurethane-39, stearyl behenate, cetyl alcohol, ascorbic acid, benzoic acid, sodium bisulfite, sorbic acid, tocopheryl acetate.

Test	Result	Specifications
Identification	Conform	Method A, B (A0133720-28)
Relative density	0.98 g/ml	0.97-1 g/ml
pH	3.5	3.5 - 5.5
Viscosity	172400 mPa s	100000 – 350000 mPa s
Benzoic acid	0.096 %	0.06- 0.12 %
Sorbic acid	0.09 %	0.06- 0.12 %
Total content of aerobic microorganism	< 10 CFU/g	< 1000 CFU/g
Total content of fungi and yeast	< 10CFU/g	< 100 CFU/g
<i>Staphylococcus aureus</i>	Conform	Absence
<i>Pseudomona aeruginosa</i>	Conform	Absence