



QUALITY CERTIFICATE No _____
for Concentrated Solution of “Hydrated C₆₀ Fullerene” (C₆₀FWS)

Name: concentrated solution of “Hydrated C₆₀ Fullerene”

Manufacturing date: _____

Batch No _____

Batch size: _____

Name full and abbreviated	Concentrated Solution of “Hydrated C₆₀ Fullerene” (C₆₀FWS)
NTD (normative and technical documentation) for the product	TC of Ukraine 15.8–35476395–002:2010
Concentration according to C ₆₀ fullerene mg/dm³
Composition	hydrated C ₆₀ fullerene with formula C ₆₀ @{H ₂ O} ₂₀₋₂₄ and water
Form of package of the product cm³ glass ampoule
Shelf life	2 years from manufacturing date
Developer and manufacturer	“Institute of Physiological Active Compounds”
Additional sterilization*	Yes / No

*- Sterilized for 2 hours at temperature 120 °C

QUALITY INDEXES

Date of the analysis _____

Index	Standard according to TCU 15.8–35476395–002:2010	Results of analysis
Appearance	Transparent liquid without visible precipitate, foreign particles and impurities; opalesces in reflected light	Complies
Color	Light brown to red-brown	Complies
Odour	Typical for water, without any foreign odour	Complies
Taste	When C ₆₀ FWS is diluted with water to the concentration of 0.002 mg/dm ³ C ₆₀ fullerene, the taste is typical for pure water and without foreign aftertaste	Complies
Refractive index, n _{D20}	1,3330 - 1,3337	
pH value	5,5 - 8,5	
Density at 20°C, g/cm ³ :	1,000 - 1,050	
C ₆₀ concentration, mg/dm ³	... +/- 5%	
Location of maxima of absorption bands in UV-Vis spectrum, nm	λ ₁ =342 - 344 λ ₂ =263 - 267 λ ₃ =218 - 222	
Ratio of the optical density values $A_{\lambda_2}/A_{\lambda_1}$	1,7 - 1,9	

Conclusion: sample of concentrated solution of “Hydrated C₆₀ Fullerene” (C₆₀FWS) complies to the requirements of TC of Ukraine 15.8-35476395-002:2010 according to the indicated quality indexes.

Head of the laboratory _____ / _____ / _____