

## IPA-F Isopropyl Alcohol CERTIFICATE OF ANALYSIS

No: 004Ph/07/2023

**PRODUCT NAME :** IPA-F Isopropyl Alcohol

**CAS:** 67-63-0

**BATCH NUMBER:** 1115/23/003/LUZ

**PRODUCTION DATE:** 14-07-2023

**EXPIRATION DATE:** 14-07-2024

**SPECIFICATION NUMBER:** TDS/004PH

**APPEARANCE :** Clear liquid without impurities

**ADDITIONAL INFORMATION:** The product meets the requirements of the European Pharmacopoeia

Parameter	Unit	Limit	Result	Method
Isopropanol content	[ % m/m ]	min 99.8	99.9	GC / M 595
Water content	[ % m/m ]	max 0.2	0.01	ISO 760
Colour	[ Pt-Co ]	max 10	2	ISO 6271
Benzene content	[ ppm ]	max 1	0	UV spectrometry/ M 634
Total content of impurities except 2-Butanol	[ % m/m ]	max 0.04	0.00	GC / M 595
Acidity as acetic acid	[ % m/m ]	max 0.001	0.000	ASTM D 1613
Absorbance at wavelength:				UV spectrometry/ M 634
- $\lambda=310$ nm	-	max. 0.01	0.00	
- $\lambda=290$ nm	-	max 0.02	0.00	
- $\lambda=270$ nm	-	max 0.03	0.00	
- $\lambda=250$ nm	-	max 0.10	0.02	
- $\lambda=230$ nm	-	max 0.30	0.09	
Absorption curve	-	Smooth without inflections	Pass	
Density at 20°C	[ g/ml ]	0.784 - 0.786	0.785	ISO 12185
Relative density	-	0.785 - 0.789	0.786	Calculated
Refractive Index $n_D^{20}$	-	1.376 - 1.378	1.377	ISO 5661
Non-volatile substances	[ mg/100 ml ]	max 1	0	ISO 759

The certificate was made on the basis of the supplier's certificate. The data contained in this certificate were prepared on the basis of certificates and quality standards of suppliers or manufacturers and on the basis of tests in the factory laboratory.

It is the responsibility of our customers to ensure that the use of this product is safe, legal and technically appropriate for their intended use. The above specification parameters are maintained for the product stored in tightly closed containers under the conditions described in the safety data sheet.

Prepared by

M.Sc. Łukasz S. Ujma

An electronic document does not require a seal or signature.