

PT. Kromtekindo Utama

Jl. RC. Veteran No. 3 Tanah Kusir, Bintaro
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Certificate of Qualification

This is to certify that the stated instrument has been successfully
passed all qualification tests

Issued for : PT. Mersifarma
Diterbitkan untuk : Jl. Raya Bogor No. 52, Cisalak, Kec. Sukmajaya, Kota Depok
Jawa Barat, 16416

Date of Calibration : November 03, 2025
Tanggal Kalibrasi

Performer : Hikmat Ramdani
Pelaksana

Instrument Identification : RD LC 03 UV
Identifikasi Instrumen

Instrument Name	Model Number	Serial Number
Pump	Alliance	E21SM4958A
Injector	Alliance	E21SM4958A
Sample Cooler	SHC	E21SHC261A
Column Heater	SMC	E21SMC409G
Detector	2489 UV/Vis	F2187E530A
Integrator	Empower 3 Software	N/A

This Certificate includes 2 pages
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Jakarta, November 3, 2025
Performed By,

Hikmat Ramdani
Technical Support

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Qualification Result

Performance Under Test	Results	Acceptable Range	Status
Flowrate Accuracy Test 1 mL/min	10 min 06 sec	10 min $\pm$ 18 sec	Passed
Flowrate Accuracy Test 0.5 mL/min	09 min 59 sec	10 min $\pm$ 36 sec	Passed
GPV Accuracy Test	0.1 %	< 0.5 %	Passed
Injection Volume Accuracy Test	50.58 uL	50 $\pm$ 1 uL	Passed
Sample Cooler Temperature Accuracy Test	16.8 ° C	15.0 $\pm$ 4° C	Passed
Column Heater Temperature Accuracy Test	40.2° C	40.0 $\pm$ 3° C	Passed
2489 UV/Vis : Detector wavelength Accuracy Test	255 nm 377 nm 520 nm	255 $\pm$ 1.5 nm 379 $\pm$ 1.5 nm 522 $\pm$ 1.5 nm	Passed Passed Passed
Detector Linearity Test	4.2 %	< 4.5 %	Passed
Overall System Performance : % RSD (Propyl Paraben) - Retention Time - Area - Injector Linearity Test	0.1 % 0.1 % 0.9998	$\leq$ 1 % $\leq$ 1 % $\geq$ 0.9990	Passed Passed Passed