

PT. Kromtekindo Utama

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Jakarta Selatan 12330

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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

: June 3, 2025

Tanggal Kalibrasi

Performer

: Hikmat Ramdani

Pelaksana

Instrument Identification :

RD LC 08 UV

Identifikasi Instrumen

Instrument Name	Model Number	Serial Number
Pump	Alliance	M23SM4062A
Injector	Alliance	M23SM4062A
Sample Cooler	SHC	M23SHC404A
Column Heater	SMC	F23SMC706G
Detector	2489 UV/Vis	B2487E144A
Integrator	Empower 3 Software	N/A

This Certificate includes 2 pages

Sertifikat ini terdiri dari 2 halaman

Jakarta, June 3, 2025

Performed By,

Hikmat Ramdani
Technical Support

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Injector	Alliance	M23SM4062A
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Detector	2489 UV/Vis	B2487E144A
Integrator	Empower 3 Software	N/A

Qualification Result

Performance Under Test	Results	Acceptable Range	Status
Flowrate Accuracy Test 1 mL/min	10 min 05 sec	10 min $\pm$ 18 sec	Passed
Flowrate Accuracy Test 0.5 mL/min	10 min 02 sec	10 min $\pm$ 36 sec	Passed
GPV Accuracy Test	0.4 %	< 0.5 %	Passed
Injection Volume Accuracy Test	49.14 uL	50 $\pm$ 1 uL	Passed
Sample Cooler Temperature Accuracy Test	16.3 ° C	15.0 $\pm$ 4° C	Passed
Column Heater Temperature Accuracy Test	40.7 ° C	40.0 $\pm$ 3° C	Passed
2489 UV/Vis : Detector wavelength Accuracy Test	257 nm 379 nm 522 nm	255 $\pm$ 1.5 nm 379 $\pm$ 1.5 nm 522 $\pm$ 1.5 nm	Passed Passed Passed
Detector Linearity Test	2.6 %	< 4.5 %	Passed
Overall System Performance : % RSD (Propyl Paraben)			
- Retention Time	0.2 %	$\leq$ 1 %	Passed
- Area	0.8 %	$\leq$ 1 %	Passed
- Injector Linearity Test	0.9999	$\geq$ 0.9990	Passed