

Certificate No. : 001/QFS/MKT/RG/BMRD/VI/26

CERTIFICATE OF ANALYSIS

Date : 12-Jun-26
Product Name : Refined Glycerine

Parameter	Result	Specification	Method
Appearance	Clear and Transparent	Clear and Transparent	USP 47
Glycerine Content, %	99.91	99.70 Min	Calculation
Identification A by IR *	Pass	Pass	USP 47
Identification C by GC *	Pass	Pass	USP 47
Specific Gravity (25/25 OC) *	1.2615	1.2490 Min	USP 47
Color (Pt-Co)	3.9	5.0 Max	ISO 6271-2015
Residue on Ignition, % *	<0.01	0.01 Max	USP 47
Chlorides, ppm *	<10	10 Max	USP 47
Sulfate, ppm *	<20	20 Max	USP 47
Chlorinated Compounds, ppm *	<30	30 Max	USP 47
Fatty Acid and Esters, mL NaOH 0.5N	0.22	1.0 Max	USP 47
Assay, %	99.82	99.0 - 101.0	USP 47
Diethylene Glycol, % *	<0.10	0.10 Max	USP 47
Ethylene Glycol, % *	<0.10	0.10 Max	USP 47
Water Content, %	0.09	0.30 Max	USP 47 Methode Ic
Individual Impurities, % *	<0.1	0.1 Max	USP 47
Total Impurities, % *	<1.0	1.0 Max	USP 47
Arsenic, ppm **	Not Detected	0.1 Max	ICP
Cadmium, ppm **	Not Detected	0.1 Max	ICP
Lead, ppm **	Not Detected	0.1 Max	ICP
Mercury, ppm **	Not Detected	0.1 Max	ICP

INFORMATION

: -*: Non accredited parameters

: -**: Based on test result from Accredited independent test laboratory

Prepared by,

Date : 12 June 2026



Name : Zuhdi Setyo Purnomo
Title : QC Officer Biodiesel

Approved by,

Date : 12 June 2026



Name : Sigit Budiarjo
Title : QC Section Head Biodiesel