# PT. DUA KUDA INDONESIA

050/F01-QCD/XI/2024

## CERTIFICATE OF ANALYSIS

| | | | |
|---|---|---|---|
| Product Name | Glycerine | Model | USP997 |
| Description of Goods | Glycerine | Manufacturer Date | 2024-10-28 |
| | | Batch No./Lot No. | 20241028 |
| | | Expire Date | 2026-10-27 |
| | | Quantity | 20 MTS |

| INSPECTION ITEM | Standard | Method | RESULT |
|---|---|---|---|
| Color,Hazen | 10max | AOCS Td Ib-64 | 7.4 |
| Water Content, %wt | 0.3max | USP 39 | 0.09 |
| Arsenic, ppm | 1.5max | USP 39 | <1.5 |
| Heavy metal, Lead, ppm | 5max | USP 39 | <5 |
| Fatty acid and esters (titrant:0.5N NaOH),ml | 1max | USP 39 | 0.65 |
| Specific Gravity at 25°C | 1.2612min | USP 39 | 1.2617 |
| Assay, %wt | 99.7min | USP 39 | 99.90 |
| Chloride, ppm | 10max | USP 39 | <10 |
| Sulphate, ppm | 20max | USP 39 | <20 |
| Chlorinated Compound, ppm | 20max | USP 39 | <20 |
| Residue on Ignition, %wt | 0.01max | USP 39 | 0.003 |
| Ethylene Glycol content, %wt | 0.1max | USP 39 | <0.1 |
| Diethylene Glycol content, %wt | 0.1max | USP 39 | <0.1 |
| Identification by IR | Meet requirement | USP 39 | Positive |
| Identification by GC | Meet requirement | USP 39 | Positive |
| Individual Impurities,% | 0.1max | | <0.1 |
| Total Impurities,% | 1.0max | | <1.0 |
| Refractive Index 20°C | 1.470-1475 | | 1.4738 |
| **Conclusion** | **PASS** | | |

Analyst

( Hendri )

Checked

( Riski )

Approved

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( Chen Ming Fu )