



PT Musim Mas



CERTIFICATE OF ANALYSIS

TO WHOM IT MAY CONCERN

PRODUCT CODE : MASCEROL

PRODUCT NAME : MASCEROL GLYCERINE 99.7% USP

PRODUCTION DATE : 015716EMD2C5L : 26 MAY 2026
015916END3C5L : 27 MAY 2026
016116END3C5L : 30 MAY 2026

EXPIRY DATE : 015716EMD2C5L : 26 NOVEMBER 2027
015916END3C5L : 27 NOVEMBER 2027
016116END3C5L : 30 NOVEMBER 2027
(STORE UNDER COOL, DRY AND SHADED WAREHOUSE.
AVOID DIRECT HEAT AND SUNLIGHT)

TEST PARAMETER	UNIT	TEST METHOD	RESULTS			SPECIFICATION
			015716EMD2C5L	015916END3C5L	016116END3C5L	
GLYCERINE CONTENT	%	AOCS Ea 7-95	99.9	99.9	99.9	99.7 MIN
SPECIFIC GRAVITY	25/25°C	USPNF, 2025	1.2619	1.2618	1.2618	1.2612 MIN
COLOUR	APHA	AMT-FGQ-G10	<10	<10	<10	10 MAX
IDENTIFICATION TEST A ^{*1}		USPNF, 2025	PASSED	PASSED	PASSED	PASSES
IDENTIFICATION TEST B						
- DIETHYLENE GLYCOL	%	USPNF, 2025	ND (<0.01)	ND (<0.01)	ND (<0.01)	0.10 MAX
- ETHYLENE GLYCOL	%	USPNF, 2025	ND (<0.01)	ND (<0.01)	ND (<0.01)	0.10 MAX
IDENTIFICATION TEST C ^{*1}		USPNF, 2025	PASSED	PASSED	PASSED	PASSES
RESIDUE ON IGNITION	%	USPNF, 2025	<0.01	<0.01	<0.01	0.01 MAX
MOISTURE	%	USPNF, 2025	0.05	0.08	0.07	0.3 MAX
CHLORIDE	ppm	USPNF, 2025	<10	<10	<10	10 MAX
SULFATE	ppm	USPNF, 2025	<20	<20	<20	20 MAX
HEAVY METALS ^{*1}	ppm	USP 39	<5	<5	<5	5 MAX
LIMIT OF CHLORINATED COMPOUNDS	ppm	USPNF, 2025	<30	<30	<30	30 MAX
FATTY ACID & ESTERS	ml 0.5N NaOH	USPNF, 2025	0.24	0.24	0.26	1.0 MAX
RELATED COMPOUNDS (INDIVIDUAL IMPURITY)	%	USPNF, 2025	<0.1	<0.1	<0.1	0.1 MAX
RELATED COMPOUNDS (TOTAL IMPURITIES)	%	USPNF, 2025	<1.0	<1.0	<1.0	1.0 MAX
ASSAY	%	USPNF, 2025	99.9	99.9	99.9	99.0 - 101.0

Note : ^{*}=not accredited under ISO/IEC 17025

¹ =Based on periodic testing results by External laboratory

ND = Not Detected

LEONG HOW WAN
QUALITY MANAGER

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