

**Analytical Laboratory of Oleochemicals and Specialty Fats**

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ORIGINAL

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MEDAN, 05 MAY 2018

CERTIFICATE OF ANALYSIS

REF NO : SC/18/OLE/0590(1)

DESCRIPTION OF GOODS : ORIGIN : INDONESIA ✓
 7.2 MT = 40 DRUMS ✓
 OLEIC ACID 78 PCT 7.2MT ✓

LOT NO. : 0148CME2L ✓

MANUFACTURING DATE : 31 MARCH 2018 ✓

EXPIRATION DATE : 31 MARCH 2020 ✓
 (STORE UNDER COOL, DRY AND SHADED WAREHOUSE)
 AVOID DIRECT HEAT AND SUNLIGHT)



TEST PARAMETER	UNIT	TEST METHOD	RESULT	SPECIFICATION
ACID VALUE	mg KOH/g	AOCS Te 1a-64	198.5 ✓	195-205
SAPONIFICATION VALUE	mg KOH/g	AOCS TI 1a-64	199.6 ✓	196-206
IODINE VALUE	gl ₂ /100g	AOCS Tg 1a-64	93.7 ✓	90-100
TITRE	°C	AOCS Tr 1a-64	8.6 ✓	9.0 MAX
COLOUR LOVIBOND 5 1/4"	R/Y	AMT-FGQ-F09	0.5R 3.2Y ✓	1.2R 10Y MAX
<u>FATTY ACID COMPOSITION</u>		AMT-FGQ-F23		
C18 & BELOW			7.8 ✓	13 MAX
C18:1			79.1 ✓	78 MIN
C18:2			12.4 ✓	15 MAX
OTHERS			0.8 ✓	1 MAX



LEONG HOW WAN
 QA MANAGER
 PT. MUSIM MAS
 (AS MANUFACTURER)
 (DMY)