

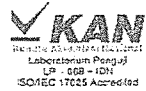


# PT. MUSIM MAS

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## Analytical Laboratory of Oleochemicals and Specialty Fats

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ORIGINAL

MEDAN, 30 APRIL 2015

## CERTIFICATE OF ANALYSIS

DESCRIPTION OF GOODS : 1X20'FCL : 18 MT = 72 DRUMS  
 MASCEROL GLYCERINE 99.7% USP KOSHER FOR PASSOVER  
 PACKING: STANDARD MUSIM MAS 250KG NEW STEEL LINED DRUMS  
 PALLETIZED (STANDARD 4-WAY WOODEN PALLET) ; SHRINKWRAPPED  
 CUSTOMER PURCHASE NUMBER: BPC-423906

VESSEL NAME : UNI-AHEAD V.0082-438B T/S ITAL UNICA V.0396-098E  
 T/S EVER SALUTE V.0770-050E

SHIPMENT FROM : BELAWAN, INDONESIA

SHIPMENT TO : LONG BEACH, CA, UNITED STATES

SHIPMENT DATE : 30 APRIL 2015

LOT NO. : 0995CME3L

PRODUCTION DATE : 20 MARCH 2015

EXPIRY DATE : 20 SEPTEMBER 2016  
 (STORE UNDER COOL, DRY AND SHADED WAREHOUSE.  
 AVOID DIRECT HEAT AND SUNLIGHT)

TEST PARAMETER	UNIT	TEST METHOD	RESULT	SPECIFICATION
GLYCERINE CONTENT	%	AOCS Ea 7-95	99.9	99.7 MIN
SPECIFIC GRAVITY	25/25°C	USP 37	1.2618	1.2612 MIN
COLOUR	APHA	AMT-FGQ-G10	<10	10 MAX
IDENTIFICATION TEST A* <sup>1</sup>		USP 37	PASSED	PASSES USP 37
IDENTIFICATION TEST B* <sup>1</sup>				
- DIETHYLENE GLYCOL	%	USP 37	<0.01	0.10 MAX
- ETHYLENE GLYCOL	%	USP 37	<0.01	0.10 MAX
IDENTIFICATION TEST C* <sup>1</sup>		USP 37	PASSED	PASSES USP 37
RESIDUE ON IGNITION	%	USP 37	<0.01	0.01 MAX
WATER	%	USP 37	0.06	0.3 MAX
CHLORIDE	ppm	USP 37	<10	10 MAX.
SULFATE	ppm	USP 37	<20	20 MAX
HEAVY METALS* <sup>1</sup>	ppm	USP 37	<5	5 MAX
LIMIT OF CHLORINATED COMPOUNDS	ppm	USP 37	<30	30 MAX
FATTY ACID & ESTERS	ml 0.5N NaOH	USP 37	0.32	1.0 MAX
RELATED COMPOUNDS (INDIVIDUAL IMPURITY)* <sup>1</sup>	%	USP 37	<0.1	0.1 MAX
RELATED COMPOUNDS (TOTAL IMPURITIES)* <sup>1</sup>	%	USP 37	<1.0	1.0 MAX
ASSAY	%	USP 37	99.9	99.0 - 101.0

Note: Not accredited under ISO/IEC 17025  
 based on periodic testing results



LEONG HOW WAN  
 QA MANAGER  
 REF NO. SC/15/GLY/0082(2)  
 PT. MUSIM MAS  
 (AS MANUFACTURER)  
 (BT)

IMPORTANT: All information provided is believed to be accurate and complete. The data provided is representative of the product quality on the date of analysis for the lot number indicated. This certificate of analysis may not include all of the constituents of the product. Persons using this information should make their own determination regarding its suitability for their particular application. This certificate of analysis shall not in any way limit or preclude the operation and effect of the applicable terms and conditions of sale.