



Factory:  
 Jl. Oleo, Kawasan Industri Medan II Saentis  
 Percut Sei Tuan, Deli Serdang - Medan 20371 - Indonesia  
 Tel: (62) 61 687 1123, Fax: (62) 61 687 1152 - 61 687 1153  
 Email: oleo@musimmas.com

**ORIGINAL**

A member of Musim Mas Group  
 www.musimmas.com

**PT Musim Mas**

Head Office: Jl. K.L. Yos Sudarso Km 7,8 Tanjung Mulia - Medan 20241 - Sumatera Utara - Indonesia  
 Tel: (62) 61 661 5511 - 61 661 9866, Fax: (62) 61 661 3060 - 61 661 7386



MEDAN, 11 JULY 2018

**CERTIFICATE OF ANALYSIS**

REF NO: SC/18/GLY/0376(2)

DESCRIPTION OF GOODS : MASCEROL GLYCERINE 99.7% USP KOSHER FOR PASSOVER  
 CUSTOMER PURCHASE NUMBER : BMS-801085

PRODUCT CODE : 702377

LOT NO. : 1948GME3L

PRODUCTION DATE : 03 JULY 2018

EXPIRY DATE : 03 JANUARY 2020  
 (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 41	1.2617	1.2612 MIN
COLOUR	APHA	AMT-FGQ-G10	<10	10 MAX
IDENTIFICATION TEST A <sup>1</sup>		USP 41	PASSED	PASSES USP 41
IDENTIFICATION TEST B <sup>1</sup>				
- DIETHYLENE GLYCOL	%	USP 41	<0.01	0.10 MAX
- ETHYLENE GLYCOL	%	USP 41	<0.01	0.10 MAX
IDENTIFICATION TEST C <sup>1</sup>		USP 41	PASSED	PASSES USP 41
RESIDUE ON IGNITION	%	USP 41	<0.01	0.01 MAX
WATER	%	USP 41	0.04	0.3 MAX
CHLORIDE	ppm	USP 41	<10	10 MAX
SULFATE	ppm	USP 41	<20	20 MAX
HEAVY METALS <sup>1</sup>	ppm	USP 39	<5	5 MAX
LIMIT OF CHLORINATED COMPOUNDS	ppm	USP 41	<30	30 MAX
FATTY ACID & ESTERS	ml 0.5N NaOH	USP 41	0.33	1.0 MAX
RELATED COMPOUNDS (INDIVIDUAL IMPURITY)	%	USP 41	<0.1	0.1 MAX
RELATED COMPOUNDS (TOTAL IMPURITIES)	%	USP 41	<1.0	1.0 MAX
ASSAY	%	USP 41	99.9	99.0 - 101.0

Note: <sup>1</sup>=Based on periodic testing results



LEONG SHOW WAN  
 QA MANAGER  
 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.