

# CERTIFICATE of ANALYSIS



## Deuterated Lipidomics MaxSpec<sup>®</sup> Mixture

Item No.: 40974  
Batch No.: 0805746

Expiry Date: 08MAY2026 (valid from date of certification)  
Supplied as: A solution in chloroform:methanol:ethanol (6:4:1); in amber ampules  
See table

Contents: Not less than 1 ml. Ampules are overfilled. It is advised that labs use  
Volume per Ampule: measured volumes.

Storage & Handling: Store upright and unopened at -80°C. Warm to room temperature prior  
to opening.

### Description

MaxSpec<sup>®</sup> LC-MS mixtures are purpose-built for qualitative mass spectrometry applications. This solution has been prepared using gravimetric and volumetric preparation procedures from a combination of neat and formulated pure standards, and is supplied in ampules sealed under argon. Ongoing stability tests are performed to ensure the presence of each analyte throughout the shelf life of the product. Follow recommended storage and handling conditions.

### Quality Information

Test	Limit	Result	Meets Specification
Identity, LC-MS	Identities confirmed	Pass	✓

Approval:

Title: Manager of Analytical Chemistry

Certification Date: 08MAY2025

Cayman Chemical certifies that this product meets the specifications stated in this certificate and warrants this product to meet the stated acceptance criteria through the expiry date when stored unopened as recommended.

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## Quality Control Table

Item No.	Batch No.	Item Name	Shorthand Name	Concentration (µg/ml)	RT (min)	Ion	(m/z)
27588	0671982	1-Palmitoyl-d <sub>9</sub> -2-hydroxy- <i>sn</i> -glycero-3-PE	LPE(16:0-d <sub>9</sub> )	10	3.47	[M-H]-	461.3351
28153	0568280	1-Palmitoyl-d <sub>9</sub> -2-hydroxy- <i>sn</i> -glycero-3-PC	LPC(16:0-d <sub>9</sub> )	10	3.53	[M+HCOO]-	549.3874
9003263	0555122	Heptadecanoyl-L-carnitine-d <sub>3</sub> (chloride)	CAR(17:0-d <sub>3</sub> )	5	4.15	[M+H]+	417.3766
30557	0679351	Palmitic Acid-d <sub>5</sub>	FA(16:0-d <sub>5</sub> )	40	6.83	[M-H]-	260.2643
27551	0622254	C16 Sphingomyelin-d <sub>9</sub> (d18:1/16:0-d <sub>9</sub> )	SM(d18:1/16:0-d <sub>9</sub> )	10	13.06	[M+H]+	712.6312
25265	0676864	Cholesterol-d <sub>7</sub>	Chol-d <sub>7</sub>	100	13.06	[M+H-H2O]+	376.3752
28156	0617685	PtdIns-(1-palmitoyl-d <sub>9</sub> , 2-palmitoyl) (sodium salt)	PI(16:0-d <sub>9</sub> /16:0)	10	13.08	[M-H]-	818.5761
28152	0586931	1-Palmitoyl-d <sub>9</sub> -2-Palmitoyl- <i>sn</i> -glycero-3-PS	PS(16:0-d <sub>9</sub> /16:0)	10	13.37	[M-H]-	743.555
28953	0689899	1-Palmitoyl-d <sub>9</sub> -2-Palmitoyl- <i>sn</i> -glycero-3-PG	PG(16:0-d <sub>9</sub> /16:0)	10	13.55	[M-H]-	730.5595
22787	0579274	C16 Ceramide-d <sub>7</sub> (d18:1-d <sub>7</sub> /16:0)	Cer(d18:1-d <sub>7</sub> /16:0)	5	14.28	[M+H]+	545.5634
28155	0714819	1-Palmitoyl-d <sub>9</sub> -2-Palmitoyl- <i>sn</i> -glycero-3-PE	PE(16:0-d <sub>9</sub> /16:0)	5	14.89	[M-H]-	699.5649
28154	0713415	1-Palmitoyl-d <sub>9</sub> -2-Palmitoyl- <i>sn</i> -glycero-3-PC	PC(16:0-d <sub>9</sub> /16:0)	10	15.36	[M+HCOO]-	787.6175
27591	0620184	1-Palmitoyl-d <sub>9</sub> -2-Palmitoyl- <i>sn</i> -glycerol	DG(16:0-d <sub>9</sub> /16:0)	5	17.13	[M+NH4]+	595.597
27592	0564113	1-Palmitoyl-d <sub>9</sub> -2,3-Dipalmitoyl- <i>sn</i> -glycerol	TG(16:0-d <sub>9</sub> /16:0/16:0)	10	22.29	[M+NH4]+	833.8271
28123	0683358	Cholesteryl Palmitate-d <sub>9</sub>	CE(16:0-d <sub>9</sub> )	100	23.51	[M+NH4]+	651.6752
LC-MS Conditions: Ultimate 3,000 - Q-Exactive Plus							
Mobile Phase A: Acetonitrile/Water/Formic Acid 60:40:0.1 (v/v/v), 10 mM Ammonium Formate							
Mobile Phase B: Acetonitrile/Isopropanol/Formic Acid 10:90:0.1 (v/v/v), 10 mM Ammonium Formate							
Column: Thermo Scientific Accucore 2.6 µm C30, 150 x 2.1 mm				Flow Rate: 0.4 ml/min			
Gradient: 0 min, 30% B; 5 min, 43% B; 5.1 min, 50% B; 14 min, 70% B; 14.1 min, 70% B; 21 min, 99% B; 28 min, 99% B							
Positive and Negative Electrospray Ionization				SIM			

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## Revision History

Revision No.	Date	Reason for Revision
01	08MAY2025	Initial version

## Disclaimers

### Material Safety Data

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some but not all of the information required for the safe and proper use of this material. Before use, review the complete Material Safety Data Sheet, which has been sent via email to your institution.

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**CAYMAN CHEMICAL**  
1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 • USA

**PHONE:** [800] 364-9897  
[734] 971-3335  
**FAX:** [734] 971-3640

techserv@caymanchem.com  
www.caymanchem.com