Certificate of Analysis

Reference Material & Standard

Product Name:	26 Aldehyde/Ketone DNPH Mix Solution in Acetonitrile, 15µg /mL	**Catalogue Number:**	MCHM706137
Appearance:	Liquid	**Lot Number:**	0831-SA-7251
Solvent:	Acetonitrile	**Storage:**	2°C ~ 8°C Protected from light and Sealed
Expiry Date:	Aug 30, 29		

Chemical Structure:

N/A

Warning:



NO.	Component	CAS No.	Certified Concentration Value (15µg/mL)	Uncertainty (%)
1	Formaldehyde-DNPH	1081-15-8	15.2	1.5
2	Acetaldehyde-DNPH	1019-57-4	14.6	1.5
3	Propionaldehyde-DNPH	725-00-8	14.7	1.5
4	Butyraldehyde-DNPH	1527-98-6	14.5	1.5
5	Valeraldehyde-DNPH	2057-84-3	14.5	1.5
6	Hexaldehyde-DNPH	1527-97-5	15.0	1.5
7	Methacrolein-DNPH	5077-73-6	14.9	1.5
8	Benzaldehyde-DNPH	1157-84-2	14.6	1.5
9	m-Tolualdehyde-DNPH	2880-05-9	14.7	1.5
10	Acetone-DNPH	1567-89-1	14.9	1.5
11	Butanone-DNPH	958-60-1	15.4	1.5
12	Cyclohexanone-DNPH	1589-62-4	14.8	1.5

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Signature:

Prepared by: Lisa Date: Aug 31, 25

Reviewed by: Yuki Date: Aug 31, 25

Approved by General Manager: David Date: Aug 31, 25

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NO.	Component	CAS No.	Certified Concentration Value (15μg/mL)	Uncertainty (%)
13	Acrolein-DNPH	888-54-0	14.7	1.5
14	Crotonaldehyde-DNPH	1527-96-4	14.7	1.5
15	2,5-Dimethylbenzaldehyde-DNPH	152477-96-8	14.7	1.5
16	Decanal-DNPH	1527-95-3	15.0	1.5
17	Glutaraldehyde-DNPH	5085-07-4	14.7	1.5
18	Heptaldehyde-DNPH	2074-05-7	14.5	1.5
19	Isobutyraldehyde-DNPH	2057-82-1	14.9	1.5
20	Isovaleraldehyde-DNPH	2256-01-1	15.3	1.5
21	Methyl Isobutyl Ketone-DNPH	1655-42-1	14.9	1.5
22	Nonanal-DNPH	2348-19-8	14.9	1.5
23	Octanal-DNPH	1726-77-8	14.7	1.5
24	o-Tolualdehyde-DNPH	1773-44-0	15.1	1.5
25	p-Tolualdehyde-DNPH	2571-00-8	15.2	1.5
26	2-Furfurol-DNPH	2074-02-4	15.4	1.5

Comment:

The uncertainty values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Directions:

1. General description: This product was dissolved in Acetonitrile and sub-packed in ampoule bottles. The outer packaging is plastic cylinder.

2. Characterization strategy: Certified reference materials were selected as raw materials. Characterization was based on the mass and volume of the components used in the preparation process. external standard method was used to verify the prepared value.

3. Metrological traceability: Through the use of raw materials with traceable purity values and tested/calibrated quality or volume measures, certified value results are ultimately traceable to SI basic units of mass kilogram (kg) and national statutory volume the unit of measurement liter (L).

4. Intended use: This product is suitable for identification and quantification of the analyte(s), instrument calibration, method development and quality control in analytical and R&D applications. It is not intended for administration to humans or animals, and shall not be used to diagnose, treat or cure any diseases.

5. Minimum sample size: For once use only.

6. Instructions for handling and correct use: Please shake thoroughly before use to ensure homogeneous.

Document Version:

Revision No.	Date	Reason for Revision

01	Aug 31, 25	First release.

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