

# Certificate of Analysis

## Acetaldehyde 2,4-Dinitrophenylhydrazone

### PurCert Standard

<b>Product Number</b>	PSR41878	<b>CAS No.</b>	1019-57-4
<b>Brand</b>	PureSynth	<b>Lot No.</b>	A41878T0324
<b>Molecular Formula</b>	C <sub>8</sub> H <sub>8</sub> N <sub>4</sub> O <sub>4</sub>	<b>Date of Mfg.</b>	March,2024
<b>Molecular Weight</b>	224.18 g/mol	<b>Date of Exp.</b>	February,2027

Test	Specification	Result
Description	Orange crystal	Orange crystal
Assay (HPLC)	≥ 99.5 %	99.87 %
Water (By KF)	NMT 0.300 %	0.209 %
Identification by <sup>1</sup> H NMR	Conforms to structure	Conforms
Identification by MS	Conforms to molecular mass	Conforms
Identification by IR	Conforms to structure	Conforms

**\*Traceable to Internal Reference Standard**

**Storage Condition:** Store at room temperature and keep the container tightly closed.

**Remark:** The batch complies with the prescribed quality of the above specification.

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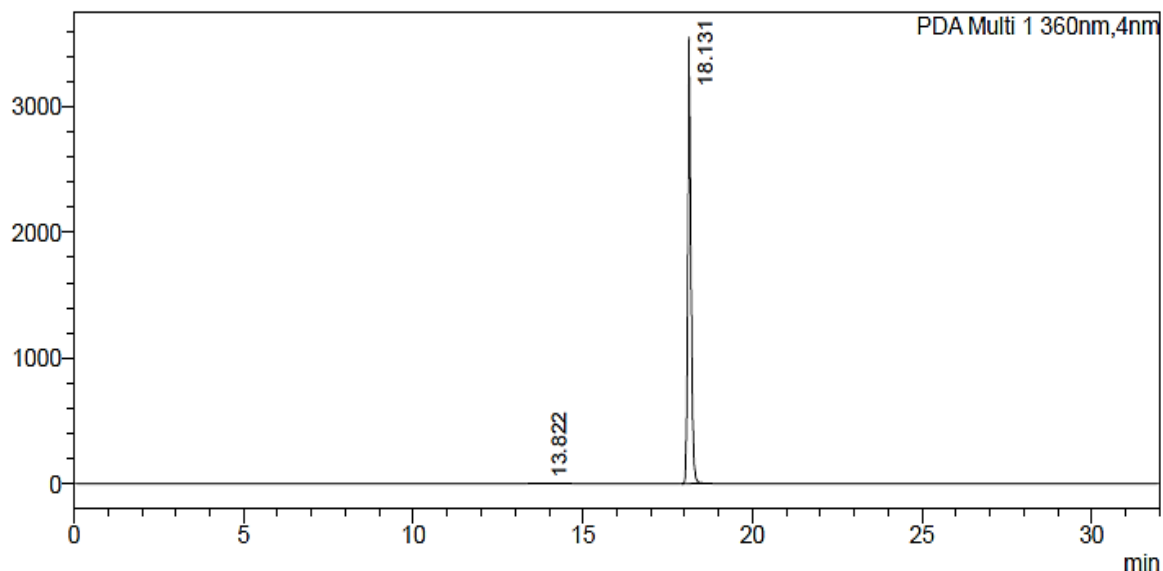
Worldwide Helpline No. 1800-120-1234-34 , Email: [info@pure-synth.com](mailto:info@pure-synth.com) , Website: [www.pure-synth.com](http://www.pure-synth.com)

## Assay by HPLC

Sample Name : Acetaldehyde 2\_4-Dinitrophenylhydrazone-A41878T0324  
Tray# : 1  
Vial# : 37  
Injection Volume : 5 uL  
Data Filename : AR24000385-Acetaldehyde 2\_4-Dinitrophenylhydrazone-A41878T0324.lcd  
Method Filename : Amicarbazone\_shmpk\_020.lcm  
Batch Filename : 23\_05\_2024\_01.lcb  
Date Acquired : 5/23/2024 5:29:00 PM  
Date Processed : 5/24/2024 9:57:18 AM

### <Chromatogram>

mAU



### <Peak Table>

PDA Ch1 360nm

Peak#	Ret. Time	Area	Height	Area%
1	13.822	28792	779	0.127
2	18.131	22727313	3546641	99.873
Total		22756105	3547420	100.000

**Purity by HPLC: 99.87 %**

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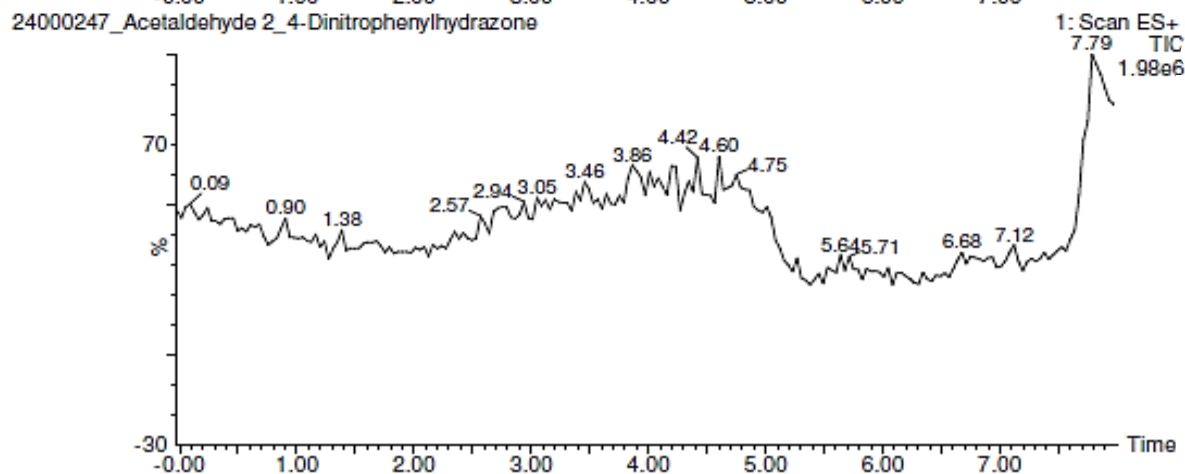
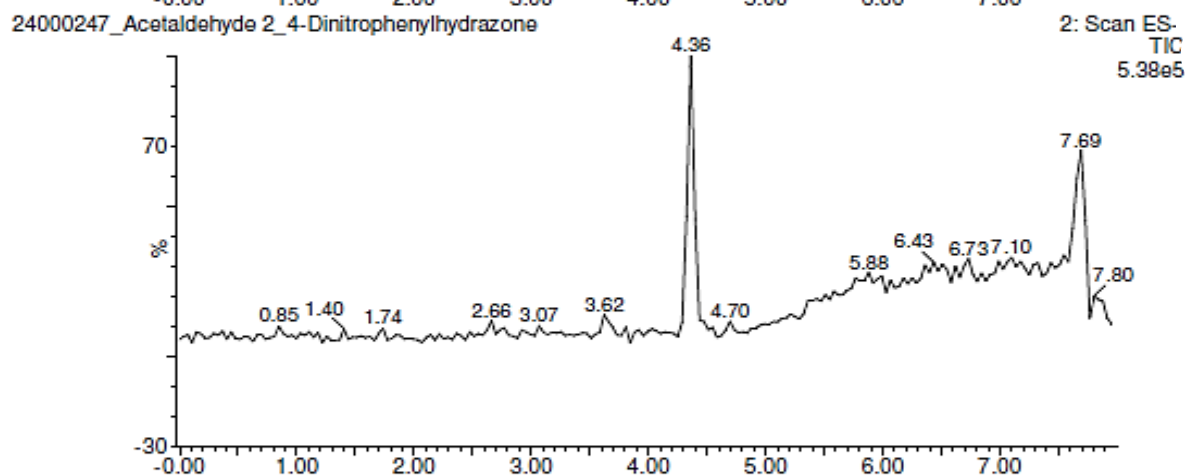
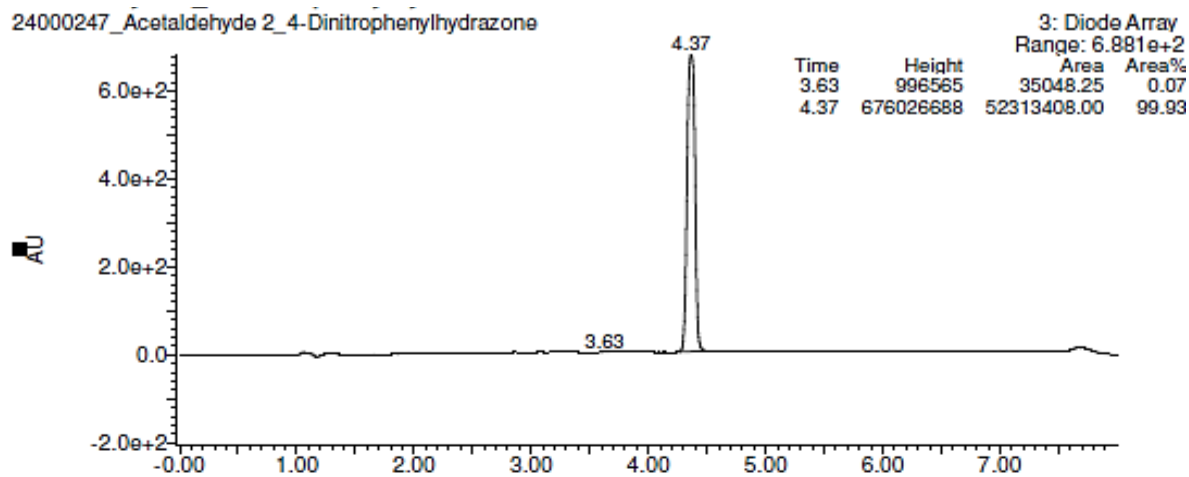
## IDENTIFICATION TESTS

### MS Spectrum:

#### Mass by MS:

Product Name: Acetaldehyde 2,4-Dinitrophenylhydrazone

Product Code: PSR41878



Identification by MS: Conforms to molecular mass

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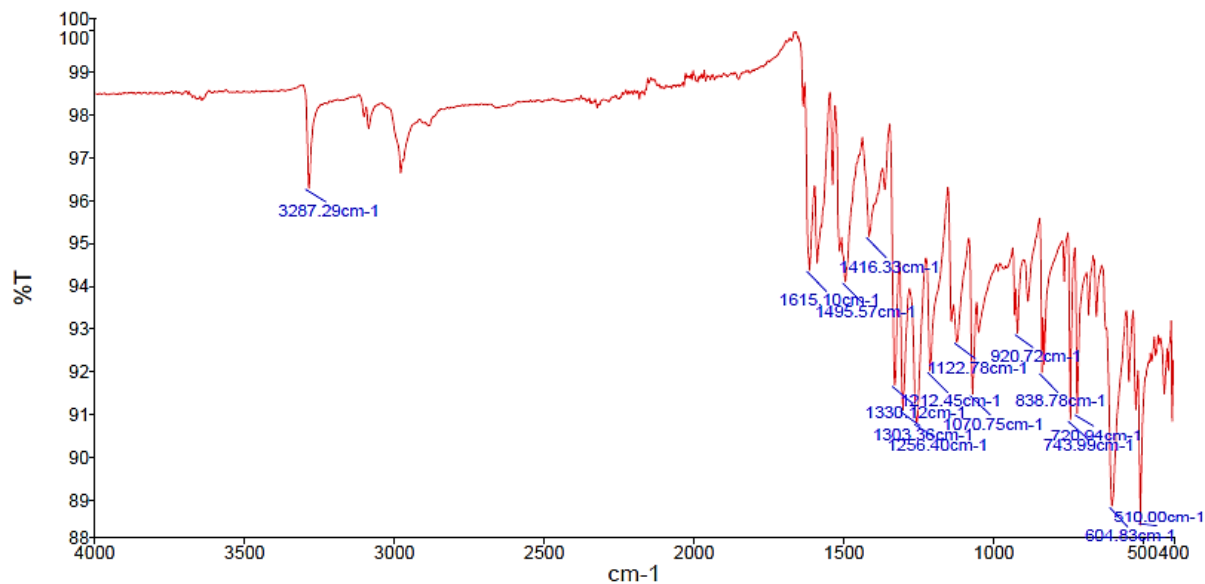
**Infrared spectrum:**

**Product Name: Acetaldehyde 2,4-Dinitrophenylhydrazone**

**Product Code: PSR41878**

Analyst

Date



AR24000307-ACETALDEHYDE-2,4-DINITROPHENYLHYDRAZONE-A41878T0324\_1 Sample 006 By Analyst Date Thursday, May 23 2024

Source Spectra Results		
Spectrum Name	Number Of Peaks	
AR24000307-ACETALDEHYDE-2,4-DINITROPHENYLHYDRAZONE-A41878T0324_1	16	
List of Peak Area/Height		
Peak Number	X (cm-1)	Y (%T)
1	3287.29	96.30
2	1615.10	94.38
3	1495.57	94.11
4	1416.33	95.17
5	1330.12	91.69
6	1303.36	91.10
7	1256.40	90.80
8	1212.45	92.02
9	1122.78	92.70
10	1070.75	91.48
11	920.72	92.90
12	838.78	91.99
13	743.99	90.88
14	720.94	91.02
15	604.83	88.86
16	510.00	88.40

**Identification by IR: Conforms to structure**

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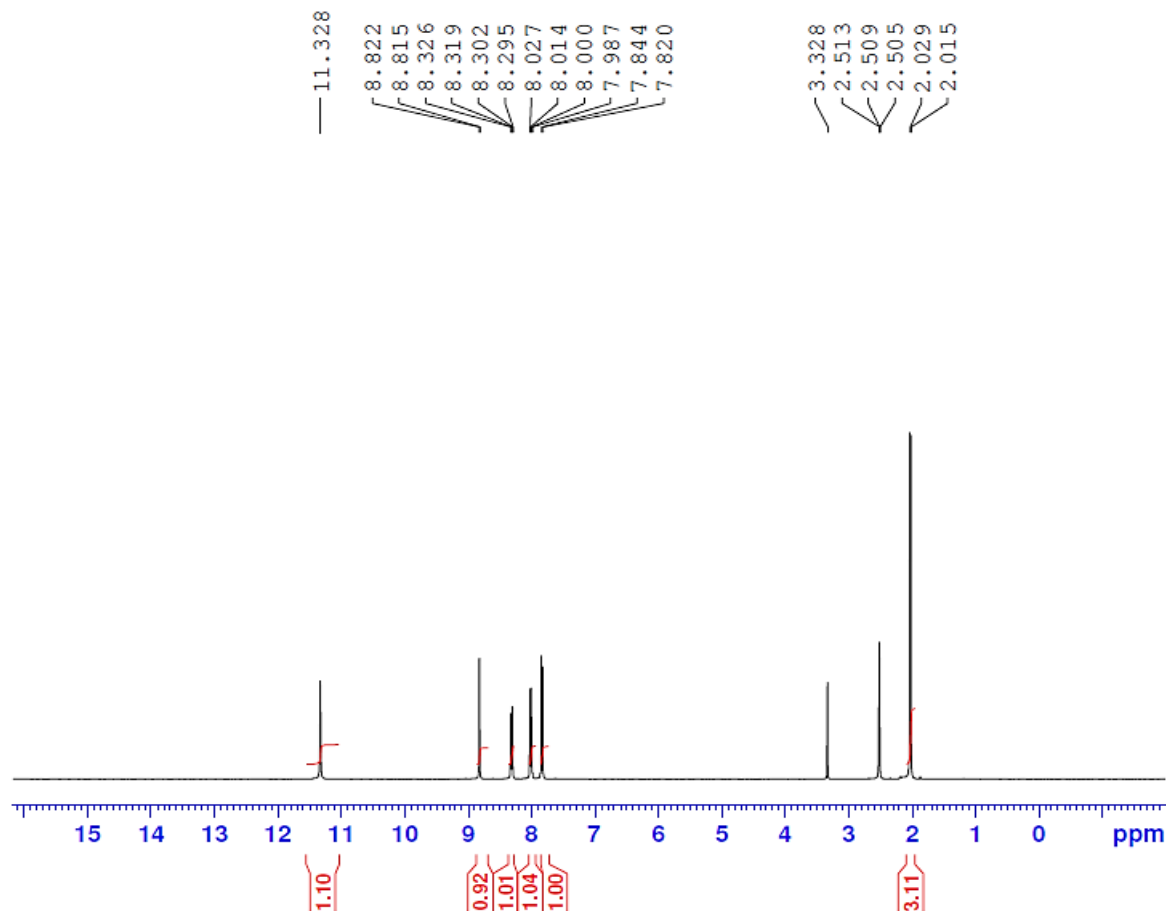
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**<sup>1</sup>H NMR Spectrum:**

**Product Name: Acetaldehyde 2,4-Dinitrophenylhydrazone**

**Product Code: PSR41878**

Acetaldehyde  
2,4-Dinitrophenylhydrazone  
B.NO-A41878T0324



Identification by <sup>1</sup>H NMR: Conforms to structure

**Maximum limits of impurities**

**WATER DETERMINATION**

Method: Karl Fisher titration

Water Content (PSR41878) = **0.209 %**

Approved By  
Head - Technical

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