

# Certificate of Analysis

## Acetaldehyde Ammonia Trimer

### PurCert Standard

<b>Product Number</b>	PSR37820	<b>CAS No.</b>	58052-80-5
<b>Brand</b>	PureSynth	<b>Lot No.</b>	A37820P0524
<b>Molecular Formula</b>	C <sub>6</sub> H <sub>15</sub> N <sub>3</sub> ·3H <sub>2</sub> O	<b>Date of Mfg.</b>	May,2024
<b>Molecular Weight</b>	183.26 g/mol	<b>Date of Exp.</b>	April,2027

Test	Specification	Result
Description	White to Green powder to crystal	White crystal
Assay (By <sup>1</sup> H NMR)	≥ 98.0 %	99.99 %
Water (By KF)	NMT 35.0 %	0.018 %
Density	0.834-0.837 g/cm <sup>3</sup>	0.836 g/cm <sup>3</sup>
Identification by <sup>1</sup> H NMR	Conforms to structure	Conforms
Identification by IR	Conforms to structure	Conforms

**\*Traceable to Internal Reference Standard**

**Storage Condition:** Store at a temperature of 2-8°C and keep container tightly closed in a dry and well-Ventilated place.

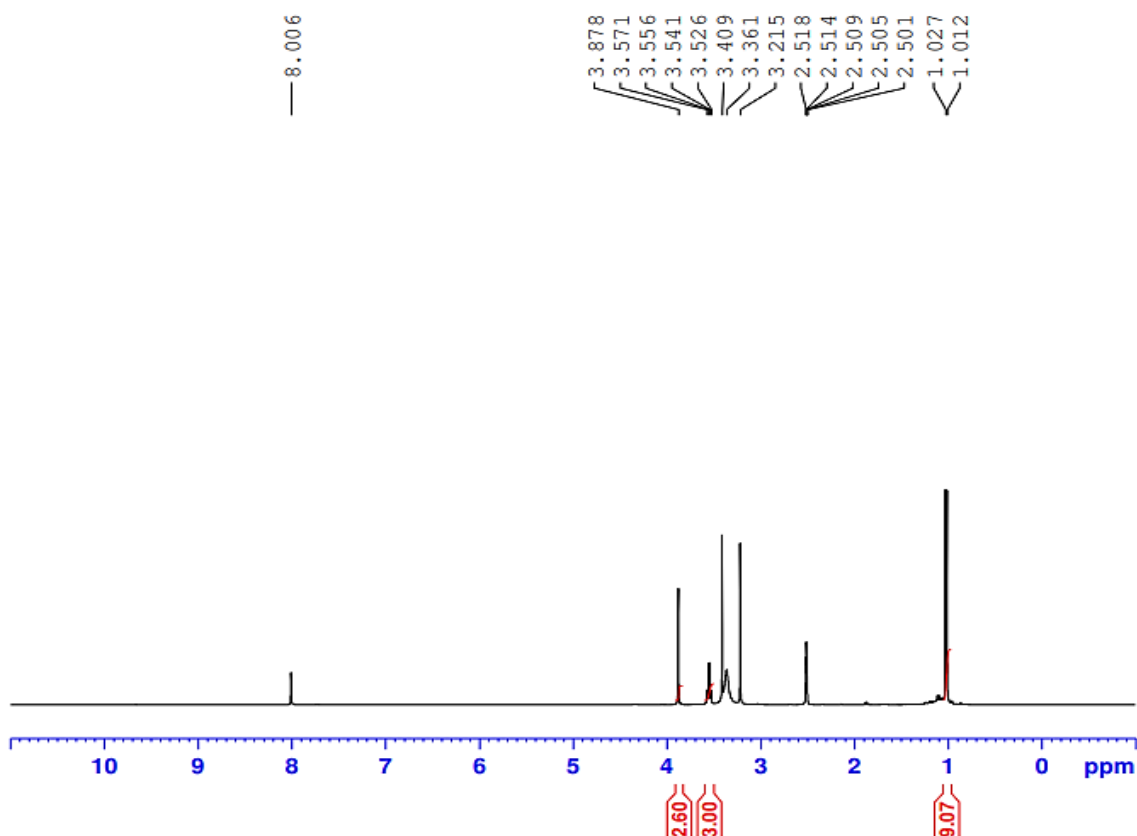
**Remark:** The batch complies with the prescribed quality of the above specification.

*This is a computer-generated report -does not required sign*

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## Assay by $^1\text{H}$ NMR

Acetaldehyde Ammonia Trimer  
Q-NMR in DMSO



NMR Assay of Acetaldehyde Ammonia Trimer, B.No: B.no-A37820P0524

Assay (%w/w)	$\frac{I(A) \times MW(A) \times \text{No. of H's (B)} \times W(B) \times A(B)}{\text{No. of H's (A)} \times W(A) \times I(B) \times MW(B)}$
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Where

I(A)	the integral of the signal from sample	3.0000
I(B)	the integral of the signal from internal Standard	2.6000
MW(A)	Molecular weight of sample	129.2070
MW(B)	Molecular weight of internal standard (caffeine)	194.19
W(A)	Weight of sample	5.100
W(B)	Weight of internal Standard	6.600
No. of H's (A)	the number of protons corresponding to the integrated signal of the sample	3.00
No. of H's (B)	the number of protons corresponding to the integrated signal of the internal standard	3.00
A(B)	Potency of the internal standard	99.90

**1H-NMR Assay 99.25**

**Purity by 1H NMR: 99.25 %**

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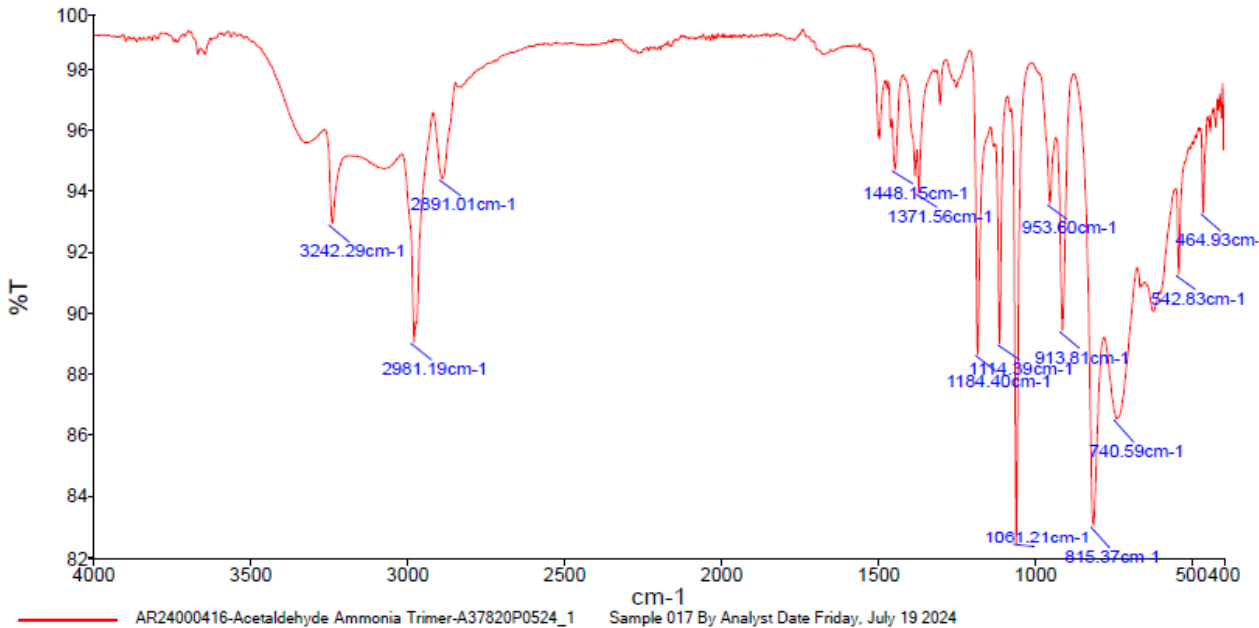
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IDENTIFICATION TESTS

Infrared spectrum:

Product Name: Acetaldehyde Ammonia Trimer  
Product Code: PSR37820

Analyst  
Date



Source Spectra Results		
Spectrum Name		Number Of Peaks
AR24000416-Acetaldehyde Ammonia Trimer-A37820P0524_1		14
List of Peak Area/Height		
Peak Number	X (cm-1)	Y (%T)
1	3242.29	92.94
2	2981.19	89.06
3	2891.01	94.42
4	1448.15	94.71
5	1371.56	93.96
6	1184.40	88.66
7	1114.39	89.00
8	1061.21	82.35
9	953.60	93.59
10	913.81	89.43
11	815.37	83.03
12	740.59	86.53
13	542.83	91.27
14	464.93	93.30

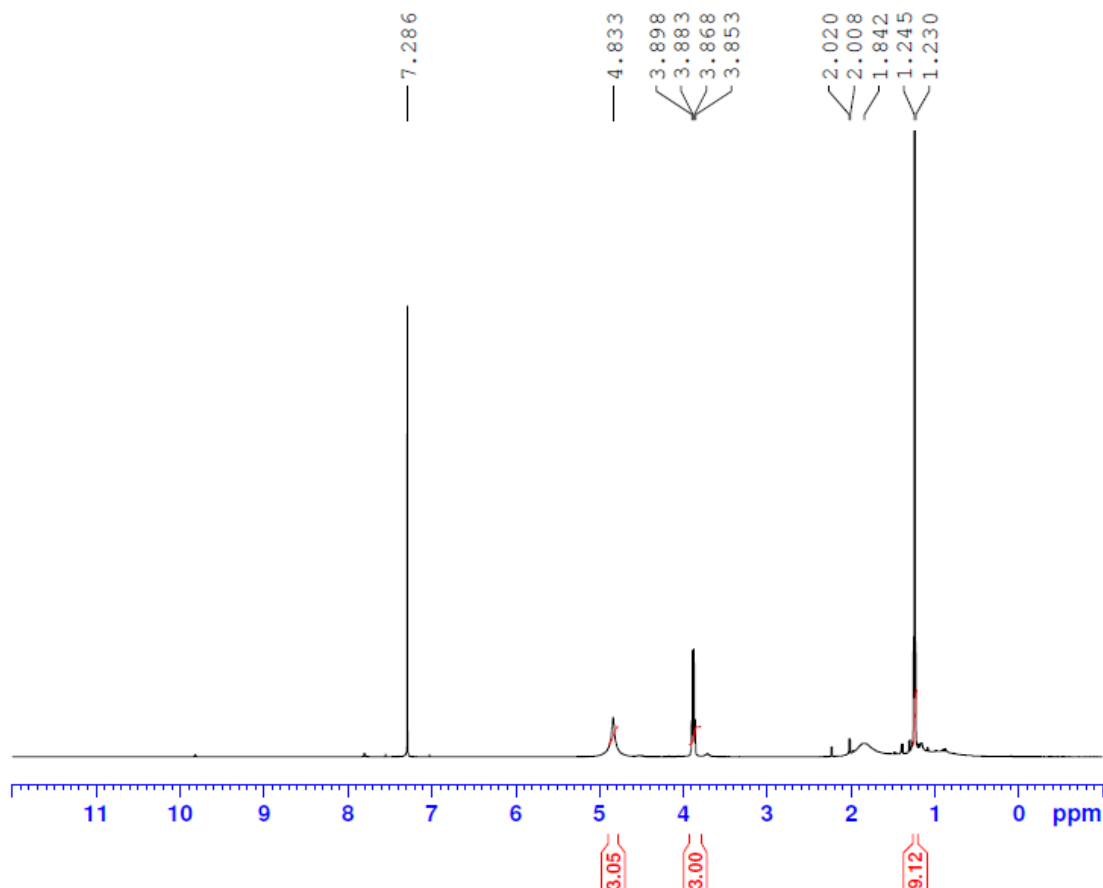
Identification by IR: Conforms to structure

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

**Product Name:** Acetaldehyde Ammonia Trimer

**Product Code:** PSR37820

Acetaldehyde Ammonia Trimer  
B.no-A37820P0524  
1H NMR in CDCl<sub>3</sub>



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

## **Maximum limits of impurities**

### **WATER DETERMINATION**

Method: Karl Fisher titration

Water Content (PSR37820) = **0.018 %**

Approved By  
Head - Technical

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