



CERTIFICATE OF ANALYSIS

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1. Identification

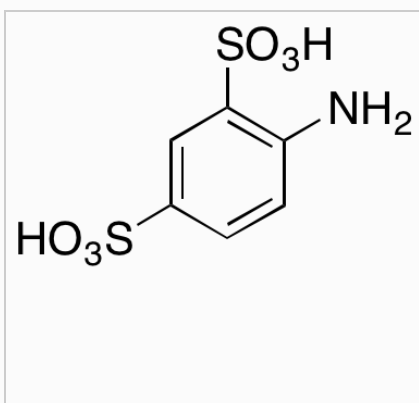
Catalogue Number: A591450

CAS Number: 137-51-9

Product: 4-Amino-1,3-benzenedisulfonic Acid (>90%)

Synonym: 1-Amino-2,4-benzenedisulfonic Acid; 2-Aminobenzene-1,5-disulfonic Acid; 4-Amino-m-benzenedisulfonic Acid; 6-Amino-1,3-benzenedisulfonic Acid; Aniline-2,4-disulfonic Acid

Structure:



Molecular Formula:

$C_6H_7NO_6S_2$

Molecular weight:

253.25

Source of Product:

N/A

Solubility:

Aqueous Acid (Slightly),
DMSO (Slightly), Methanol
(Slightly), Water (Slightly)

Lot Number: 12-TAH-13-1

Purity: >90%

Shipping Condition: This Product Is Stable To Be
Shipped At Room Temperature

Storage Condition: 20°C, Hygroscopic

2. Warning

Warning 1:

Warning 2:

Warning 3:

3. Analytical Information

| Tests: | Specifications: | Results: |
|--------------------|-----------------------|-----------------------------------|
| Appearance | White to Grey Solid | Off-White to Pale Grey Solid |
| NMR | Conforms to Structure | Conforms |
| Elemental Analysis | Conforms | %C: 23.28, %H: 3.38, %N: 4.50 |
| MS | Conforms to Structure | Conforms |
| Water Content | Report Result | ~9.3% based on Elemental Analysis |

Additional Information: N/A

Purity is based on the analytical results of the tests performed. NMR and Elemental Analysis (if available) may have an accuracy of $\pm 2\%$. Isotopic purity is based on mass distribution observed. The contents of the specifications are subject to change without advance notice, and the specification values displayed here are the most up to date values.

4. Signatures

| Reviewed By | Reviewed By | C of A Approved By | Test Date | Retest Date |
|-------------|---------------|--------------------|-----------|-------------|
| Henry Tieu | Toni Rantanen | Chanell Chu | 6/7/2021 | 6/5/2025 |