## SIGMA-ALDRICH®

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# **Product Information**

#### Acetaminophen Sigma Reference Standard

Catalog Number **A3035** Lot Number 070M5015 Store at Room Temperature

### CAS RN 103-90-2

Synonyms: 4'-Hydroxyacetanilide, 4-Acetamidophenol, *N*-Acetyl-4-aminophenol, APAP

ΗО \_м\_\_с \_сн³

**Product Description** Molecular Formula: CH<sub>3</sub>CONHC<sub>6</sub>H<sub>4</sub>OH Molecular Weight: 151.16

This product meets USP specifications (Current through USP 32, 2nd supplement) and is traceable to USP Reference Standard lot K01244.

### **Precautions and Disclaimer**

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

#### **Preparation Instructions**

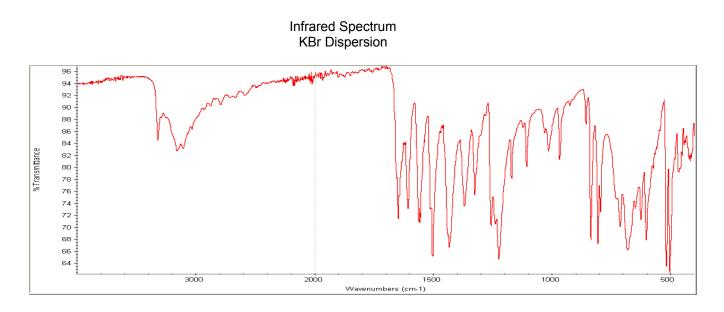
Dry a portion over silica gel for 18 hours before using. Use promptly. Discard unused material.

### Storage/Stability

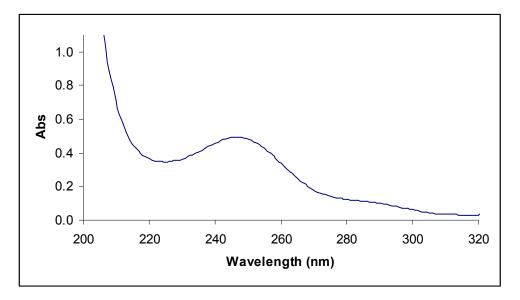
Store in a sealed vial under argon at room temperature. Protect from light.

KSP,MAM 09/10-1

| TEST  | USP 32 SPECIFICATIONS   | Result<br>Sigma Reference Standard<br>Lot 070M5015 |
|---|---|--|
| Infrared absorption spectrum KBr<br>dispersion <197A>                   | compares to standard  | compares to standard                               |
| Ultraviolet absorption spectrum<br>5 μg/mL 0.1 N HCl in methanol <197U> | compares to standard  | compares to standard                               |
| Identification C <201>  | meets requirement   | compares to standard                               |
| Melting range <741>   | between 168 °C and 172 °C   | 169 °C   |
| Water, <i>Method I</i> <921>  | not more than 0.5%  | 0.1%   |
| Residue on ignition <281>   | not more than 0.1%  | 0.0%   |
| Chloride <221>  | not more than 0.014%  | <0.014%  |
| Sulfate <221>   | not more than 0.02%   | <0.02%   |
| Sulfide   | no coloration or spotting of test paper   | no coloration or spotting                          |
| Heavy metals, Method II <231>   | not more than 0.001%  | <0.001%  |
| Free <i>p</i> -aminophenol  | not more than 0.005%  | 0.000%   |
| Limit of <i>p</i> -chloroacetanilide                                    | not more than 0.001%  | 0.000%   |
| Readily carbonizable substances <271>                                   | the test solution has no more color than<br>Matching Fluid A  | less than standard                                 |
| Assay   | not less than 98.0 percent and not more than 101.0 percent $C_8H_9NO_2$ , calculated on the anhydrous basis | 100.8%   |
| Residual Solvent  | meets the requirements  | conforms   |
|   |   | (class 3 solvents only, <0.5%)                     |



Ultraviolet Spectrum 5 µg/ml in 0.1 N HCl in Methanol



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