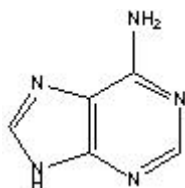


## TECHNICAL INFORMATION

Catalog Number: 100190, 100191, 194606, 194608

### Adenine

#### Structure (free base):



	<i>Free Base</i>	<i>Hydrochloride</i>
<b>Molecular Formula:</b>	C <sub>5</sub> H <sub>5</sub> N <sub>5</sub>	C <sub>5</sub> H <sub>5</sub> N <sub>5</sub> ·HCl
<b>Molecular Weight:</b>	135.1	171.6
<b>CAS #</b>	73-24-5	6055-72-7

**Synonyms:** 6-Aminopurine; 1H-Purin-6-amine; 6-Amino-1H-purine; 6-Amino-3H-purine; 6-Amino-9H-purine; 1,6-Dihydro-6-iminopurine; 3,6-Dihydro-6-iminopurine; Leuco-4; Vitamin B4

#### Solubility:

*Free Base:* Easily soluble in acetic acid; formic acid (50 mg/ml - clear, colorless solution), 0.5 M Hydrochloric acid (20 mg/ml - clear to slightly hazy, colorless to faint yellow solution). Soluble in water (1 g/2000 ml @ 25°C; 1 g/40 ml boiling water); slightly soluble in ethanol.<sup>1</sup> Aqueous solutions are neutral.<sup>1</sup>

*Hydrochloride:* Soluble in water (1 g/42 ml).<sup>1</sup> Soluble in 50% ammonium hydroxide (30 mg/ml - clear, colorless solution)

**Physical Description:** White to off-white powder

**Description:** Widespread throughout animal and plant tissues combined with niacinamide, D-ribose, and phosphoric acids; a constituent of nucleic acids and coenzymes, such as coenzyme I and II, adenylic acid, coenzyme dehydrogenase.<sup>1</sup>

#### Availability:

Catalog Number	Description	Size
100190	Adenine	1 g 5 g 25 g 100 g 1 kg

194606	Adenine, cell culture reagent	1 g 5 g 25 g 100 g
100191	Adenine Hydrochloride	5 g 25 g 100 g
194608	Adenine Hydrochloride, cell culture reagent	1 g 5 g 25 g 100 g

**References:**

- *Merck Index*, **12th Ed.**, No. 150.
- *Lange's Handbook of Chemistry*, **12th Ed.**, Dean, J.A. (ed.), Table 7-5, p. 7-394.
- *Martindale: The Extra Pharmacopoeia*, **30th Ed.**, Pharmaceutical Press, p. 1331 (1993).
- *J. Amer. Chem. Soc.*, **v. 74**, 2422 (1952).