# **PhytoTechnology Laboratories**®

### Helping to Build a Better Tomorrow through Plant Science™

## **Product Information Sheet**

# B800 6-Benzylaminopurine (BA)

Synonyms: CAS:	N6-Benzyladenine; 6-BAP 1214-39-7	
Formula:	$C_{12}H_{11}N_5$	
MW:	225.25 g/mol	
Properties:		Y
Form:	Powder	
Appearance:	White to Off-White Powder	
Application:	Cytokinin	NH
Solubility:	Minimum 50 mM KOH	
Storage Temp:	Room Temperature	N
Stock Solution Storage Temp:	2-8°C	
Typical Working	Varies by application. Concentration should be determined	N
Concentration:	by end user.	м н
Other Notes:	Plant Tissue Culture Tested;	
	For Research Use only	

### **Application Notes:**

6-Benzylaminopurine (BA) was the first synthetic cytokinin discovered and was synthesized days after the structure of kinetin was determined in 1955 (Amasino 2005; Armstrong 2002). Like other cytokinins, BA promotes cell division, shoot proliferation and organogenesis, aids in the maintenance of the shoot-apical meristem, disrupts apical dominance, and delays senescence. It was one of the first commercially produced cytokinins for delaying senescence in food and cut flowers (Salunkhe *et al.* 1962) and remains one of the most popular cytokinins used to stimulate *in vitro* shoot development.

BA is stable through one autoclave cycle (Hart et al. 2016)

*Phyto*Technology Laboratories® also carries BA solution (1 mg/mL), Product No. B130.

Please Note: While *Phyto*Technology Laboratories® tests each lot of this product with two or more plant cell/ tissue culture lines, it is the sole responsibility of the purchaser to determine the appropriateness of this product for the specific plants that are being cultured and applications that are being used.

#### **References:**

Amasino R (2005) 1955: Kinetin Arrives. The 50<sup>th</sup> Anniversary of a New Plant Hormone. *Plant Physiol.* Vol. 138(3):1177-1184

Armstrong DJ (2002) Folke Skoog: In Memory and Tribute. *J Plant Growth Regul.* Vol. 21:3-16 Hart DS, Keightley A, Sappington DS, Chritton C, Nguyen P, Seckinger GS, and KC Torres (2016) Stability of Adenine-Based Cytokinins. *In Vitro Cell. Dev. Biol.-Plant* Vol. 52(1):1-9 Salunkhe DK, Dhaliwal AS, and AA Boe (1962) N(6)-benzyladenine as a Senescence Inhibitor for Selected Horticultural Crops. *Nature* Vol. 195:724-725

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