## PhytoTechnology Laboratories, LLC™

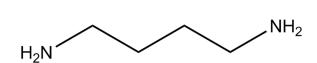


"Helping To Build A Better Tomorrow Through Plant Science"TM

## **Product Information Sheet**

HCI

P733



Putrescine Dihydrochloride

**HCI** 

Synonym: 1,4-Butanediamine Dihydrochloride; Tetramethylenediamine Dihydrochloride

CAS: 333-93-7 Formula: C<sub>4</sub>H<sub>12</sub>N<sub>2</sub>•2HCl

Molecular Wt: 161.1

**Properties:** 

Form: Powder

Appearance: White Powder

Application: Polyamine – Plant Growth Regulator

Solubility: Water

Storage Temp: Room Temperature

Other Notes: Plant Tissue Culture Tested

## **Application Notes:**

Putrescine is a polyamine, specifically a diamine that has been shown to increase root formation with auxins (Hausman *et al.* 1995) and gibberellins (Le Guen-Le Saos and Hourmant 2001). It has also been used to induce somatic embryogenesis (Sakhanokho *et al.* 2005).

## References:

F Le Guen-Le Saos, A Hourmant (2001) *Plant Growth Regulation* Vol. 35(3) pg. 277-284 JF Hausman, C Kevers, T Gaspar (1995) *Plant Science* Vol. 110(1) pg. 63-71 *Merck* **13**, 8038

HF Sakhanokho, P Ozias-Atkins, OL May, PW Chee (2005) *Plant Cell Tissue Organ Cult.* Vol 81 pg. 91-95.

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