



Product Information Sheet

HCl

P733

**Putrescine
Dihydrochloride**



HCl

Synonym: 1,4-Butanediamine Dihydrochloride; Tetramethylenediamine Dihydrochloride
CAS: 333-93-7
Formula: $C_4H_{12}N_2 \cdot 2HCl$
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
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HF Sakhanokho, P Ozias-Atkins, OL May, PW Chee (2005) *Plant Cell Tissue Organ Cult.* Vol 81 pg. 91-95.

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