

# **PhytoTechnology Laboratories**® Helping to Build a Better Tomorrow through Plant Science™

Your Molecular & Cell Technology Partner

# **Product Information Sheet**

# **D190 DKW Basal Salt Mixture**

Synonym: Driver and Kuniyuki Walnut Basal Salt

## **Properties**

Form:	Powder
Appearance:	White to Yellow
Application:	Plant Tissue Culture
Solubility:	Water
Typical Working	5 22 a/l
Concentration:	5.22 g/L
Storage Temp:	2 – 6°C
Storage Temp of	Preparation of concentrated solutions is not recommended as insoluble
Stock Solution:	precipitates may form.
Other Notes:	Contains the macro- and micronutrients as described by Driver and Kuniyuki
	(1984) and McGranahan, et al. (1987).
	pH = 3.5 - 4.5

#### Formula (mg/L)

Ammonium Nitrate	1416
Boric Acid	4.8
Calcium Chloride, Anhydrous	112.5
Calcium Nitrate	1367
Cupric Sulfate 5H <sub>2</sub> O	0.25
Na2 EDTA-2H <sub>2</sub> O	45.4
Ferrous Sulfate-7H <sub>2</sub> O	33.8
Magnesium Sulfate, Anhydrous	361.49

Manganese Sulfate H <sub>2</sub> O	33.5
Molybdic Acid (Sodium Salt)-2H <sub>2</sub> O	0.39
Nickel Sulfate-6H <sub>2</sub> O	0.005
Potassium Phosphate, Monobasic	265
Potassium Sulfate	1559
Zinc Nitrate-6H <sub>2</sub> O	17

## **Application Notes**

Plant species: Northern California Walnut (Juglans hindsii)

This medium was developed for the multiplication of shoots from nodal explants. The medium was supplemented with 4.5 µM BA and 5 nM IBA. Rooting the shoots was enhanced by dipping the basal ends of the shoots in 5 mM IBA prior to transferring to the greenhouse.

#### References

Driver, J.A. and A.H. Kuniyuki. 1984. In vitro propagation of Paradox walnut rootstock. HortScience 19:507–509.

McGranahan, GH, et al. 1987. In: Bonga, JB and DJ Durzan, Editors, Cell and Tissue Culture in Forestry. Martinus Nijhoff, Dordrecht, pp 261-271.

## **India Contact**

Life Technologies (India) Pvt Ltd.