

## Product Information Sheet

### D189 DKW Basal Medium

Synonym: DKW Basal Salts w/ Sucrose;  
Driver and Kuniyuki Walnut medium

#### Properties

Form: Powder  
 Appearance: White to Yellow  
 Application: Plant Tissue Culture  
 Solubility: Water  
 Typical Working Concentration: 35.22 g/L  
 Storage Temp: 2 – 6°C  
 Storage Temp of Stock Solution: Preparation of concentrated solutions is not recommended as insoluble precipitates may form.  
 Other Notes: Contains the macro- and micronutrients as described by Driver and Kuniyuki (1984) and McGranahan, et al. (1987). Also contains sucrose.  
 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
Na <sub>2</sub> 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
Sucrose	30,000

#### 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.

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