

PRODUCT DATA

HOUGHTO-DRAW® WD 4100

WATER SOLUBLE COPPER WIRE DRAWING COMPOUND

Houghto-Draw WD 4100 has been specially designed to allow the drawing of copper rod, intermediate, multi-draw and fine wire by simply varying the product concentration. The choice of concentration will depend on the origin of the wire, machine design, and machine speeds.

Concentration control is easily determined by refractometer and/or Babcock method. It is recommended that both concentrations and pH are monitored daily. More detailed quality checks of the emulsion should be analyzed approximately monthly.

Houghto-Draw WD 4100 can also be used at 0.5% to 2.0% concentrations in the continuous annealing water system and/or quenching system. This will help to avoid oxidation of the wire and promote easier decoiling for subsequent operations. Machines: Syncro, Niehoff, Vaughn, Techofil, Samp, Henrich.

TYPICAL RECOMMENDED USE CONCENTRATIONS

Rod Breakdown	6 - 10%
Intermediate	3 - 6%
Fine	2 - 4%
Multi-Wire	5 - 9.0%
Anneal/Quench	0.5 - 2.0%



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FEATURES

- * Draws rod, intermediate and fine wire by merely varying concentrations
- * Performs well on spray and submerged die machines
- * Low foaming characteristics
- * Free of chlorine and sulfur

BENEFITS

- * Cost-effective
- * Improved die life
- * Less shop maintenance
- * Will not stain

TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear, light amber oil
Appearance, 5% emulsion	Stable white emulsion
pH - 10% emulsion	8.7
Viscosity @ 100°F	200 SUS
A.O. Factor	1.0 x A.O. Reading
Pounds per gallon @ 60°F	7.65
Specific Gravity	0.92

SHELF LIFE

Under normal conditions, six (6) months.

SHIPPING INFORMATION

Houghto-Draw WD 4100 is available in 55 (U.S.) gallon (208 liter) drums and in bulk.

SHIPPING CLASSIFICATION

Metal Drawing Compound

STORAGE/HANDLING/DISPOSABILITY

No health or safety hazards exist when **Houghto-Draw WD 4100** is stored, used and disposed of in accordance with instructions given on the Material Safety Data Sheet for this product.

WARRANTY

The information given here is considered to be correct and is offered for your consideration, investigation and verification. No warranties are expressed or implied since the use of our products is beyond our control. Statements concerning the use of Houghton products are not to be construed as recommending the infringement of any patent.

EXPORT STATEMENT

This commodity and its technology are subject to the export control laws and regulations of the United States Government. Buyer agrees that it shall not make any disposition, by way of export, diversion, transshipment, re-export or otherwise, except as expressly permitted under United States law.