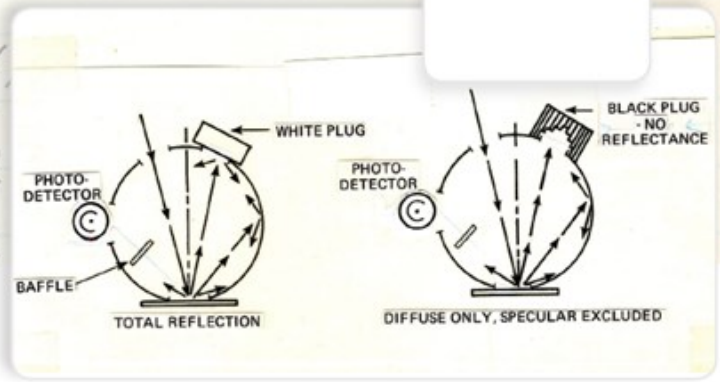
Applications Note

AN 1111



Sample Cups

A variety of sample cups are available to measure color in reflectance.

Abstract

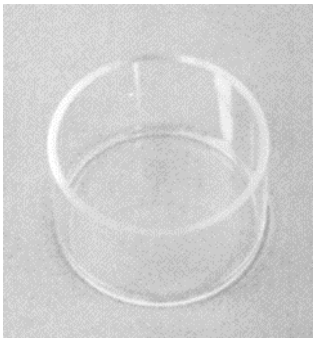
Sample cups are used to measure the reflectance of powders, granules, pellets and semi-solids and of course the color with HunterLab instruments. This application note provides an overall picture of the types of sample cups available.

The world's true measure of color
HunterLab

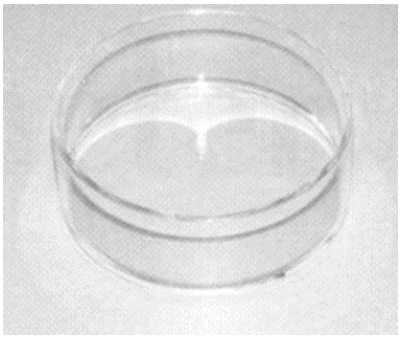
There are several types of sample cups available for measuring the reflectance of powders, granules, pellets, and semi-solids using HunterLab instruments. These types of cups are described below.

Hunterlab Glass Cups

The best measurement performance is achieved when HunterLab fused-silica sample cups are used because they are custom manufactured to HunterLab's specifications. Each cup is optical quality glass and a two-piece construct that is first fused glass-to-glass then annealed. Solvents will not affect these cups, as the two components are fused together at the edges, not glued, and they can withstand a gradual increase in temperature up to 450°F (232°C), though beware that your instrument's port insert probably cannot! The dimensions, face quality, and flatness of the cups are monitored by HunterLab Quality Assurance. For critical measurements, these glass cups are recommended, since the sample will be viewed through the glass bottom of the cup.



2.5-inch glass sample cup



5-inch glass sample cup

Pertinent specifications for the HunterLab glass cups are as follows:

HunterLab Catalog Number	Diameter (inches)	Volume to Top (mL)	Minimum Volume with Ring and Disk (mL)
04-7209-00	2.5	92	25
04-7767-00	5.0	577	NIA

To purchase HunterLab sample cups and for current pricing information, contact:

Order Processing Department
Hunter Associates Laboratory, Inc.
Telephone: (703) 471-6870
FAX: (703) 471-4237.

Disposable Cups

Disposable cups can be useful when measuring samples that are difficult to clean up or handle. HunterLab has examined several brands of polystyrene tissue culture dishes. These cups are made of clear polystyrene and have both bottoms and lids, so they can be used with instruments in both the port- up and the port-forward orientations. These cups are appropriate when the need for a disposable cup outweighs the compromise in performance. Just choose the appropriate diameter to completely cover the sample port and an appropriate height to make the sample effectively opaque. Other brands are also acceptable as long as they are optically clear and completely cover the sample port.

Two different sizes of tissue culture dishes

Brand and Type	Fisher Scientific Catalog Number	Diameter x Height (mm)
Falcon 351008	08-757-100A	35 x 10
Falcon 351007	08-757-100B	60 x 15
Falcon 351029	08-757-100D	100 x 15
Fisher extra-depth	08-757-11	100 x 25
Falcon 351058	08-757-148	150 x 15
LabTek extra-depth	08-757-28	100 x 25

These disposable polystyrene cups are available from the following vendor:

Fisher Scientific
Telephone: (800) 766-7000
FAX: (800) 926-1166
www.fishersci.com.

About HunterLab

HunterLab is the technology leader in color measurement solutions, providing instruments, software, knowledge and service to a wide variety of industries.
With over 5 decades of experience in more than 65 countries, HunterLab applies our leading edge technology to your products helping you measure and communicate color simply and effectively.

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