



SGI 29250 Color Comparison Unit "Color Box"



The SGI **Color Box** is designed for use in color comparison tests utilizing Nessler Tubes. This unit allows quality control personnel to better detect slight color variations, where such variations are critical to product integrity. The **Color Box** can be used with tests such as ASTM D-1209 and A. P. H .A. Standard Methods for visual color comparison of clear solvents, monomers, intermediate chemicals, water and waste water. The **Color Box** will yield higher technician visual accuracy by reducing the amount of external light influence, which often occurs using wooden test tube racks with white plastic reflectors. The **Color Box** utilizes an 18" fluorescent tube light with rapid starter; fuse protected and has a power indicator light. Use of the fluorescent tube eliminates excessive heat buildup which can occur with incandescent light sources.

The **Color Box** consists of:

Welded seam anodized aluminum housing with removable PVC tube holder capable of holding 9 long form Nessler Tubes. (5 standards, 4 sample tubes). The 50ml Nessler Tubes can be used with removable inserts. See below for ordering information.

Ordering Information:

Part No.	Description	Part No.	Description
Color Box	Color Comparison Unit, 115 VAC Dimensions: 15" (6 cm) by 18.5" (7.25 cm) by 5" (12.7 cm) deep Weight: 6 lbs. (empty)	29250-1600	Color Comparison tube, 100ml size Matched set of 6 tubes, 1-set per case
29250-0115	115V / 60 HZ	29250-2000	Color Comparison tube, 50ml size 20 by 312mm with 19/12 cap, matched set of 6 tubes, 1 set per case
29250-0230	230V / 50 HZ		
29250-0001	Removable clear acrylic inserts for use with 50ml tubes, 9 per set	29250-2100	Color Comparison tube, 100ml size 24 by 390mm with 24/12 cap, marked at 50 & 100ml, matched set of 12 tubes, 1 set per case
29250-1100	Color Comparison tube, Nessler, 20 mm by 300mm Unmatched, 50ml graduation mark, 6 per case	REPLACEMENT PARTS F15T8/D FLORECENT LIGHT BULB, 15 WATTS AGC-1AMP/250VAC FUSE CORD, SVT TYPE, 115 VAC, 10 AMP, 7.5 FT CORD, SVT TYPE, 220VAC, 10 AMP, 2 M	
29250-1200	Color comparison tube, Nessler, 24mm by 375mm Unmatched, 50 & 100ml graduation, 6 per case		
29250-1500	Color comparison tube, Matched set of 6 - 50ml Size tube, 20mm by 300mm, 1 set per case		



29250 COLORBOX INSTRUCTIONS FOR USE

Unit Description:

The SGI **Color Box** is designed for use in color comparison tests utilizing Nessler Tubes. This unit allows quality control personnel to better detect slight color variations, where such variations are critical to product integrity. The **Color Box** can be used with tests such as ASTM D-1209 or APHA Standard Methods for visual color comparison of clear solvents, monomers, intermediate chemicals, water and wastewater. The **Color Box** will yield higher technician visual accuracy by reducing the amount of external light influence, which often occurs using wooden test tube racks with white plastic reflectors. The **Color Box** utilizes an 18" fluorescent tube light with rapid starter; fuse protected and has a power indicator light. Use of the fluorescent tube eliminates excessive heat buildup which can occur with incandescent light sources.

The **Color Box** consists of:

Welded seam anodized aluminum housing with removable PVC tube holder capable of holding 9 long form Nessler Tubes. (5 standards, 4 sample tubes), a 15 Watt Daylight Color (6500 Kelvin) florescent light bulb source below a 9 position tube holder carriage designed to be water containing in case of Nessler tube breakage during tube insertion.

Usage:

Prepare Platinum Cobalt color reference standards per ASTM D1209 or D156 and check with a spectrophotometer to create your reference standards for comparison to your actual samples.

Usually 5 color standards are prepared and placed in 100ml Capped Nessler tubes filled to the 50 or 100 ml marked with their appropriate Color standard number as referenced in the method you are using. The other 4 open positions are then used to hold the Nessler tubes which hold the test liquids to be compared to the standard color references. The operator can then make a color comparison between the know color standards and the sample tube without influence of external ambient light in the testing room or lab. Be careful lowering the sample tubes in the individual tube holders to prevent breakage. In case of Nessler tube breakage in the Color Box carefully remove all standards and test Nessler tubes, unplug the unit and carefully dump the liquid out of the sample holder.

If the holder leaks into the bottom of the Color Box remove the 2 screws from the opposing short sides and turn unit upside down so the tube carriage will slide out and reveal the light bulb, ballast and starter. Remove the light bulb, starter and dry out the interior of the unit. (please note the carriage orientation. It must go back in the same way as it came out!)



Light box and Sample Carriage



Light Box Interior



Change out light bulb if needed using the same method.

After cleaning re-install the light bulb and starter if removed, carefully load the carriage back into the Color Box being careful not to drop the carriage in the box too quickly. This could result in light bulb breakage by the carriage. Tighten the end screws back into the box/carriage assembly.

Plug unit back in and check the unit for visible light in the sample tube bottoms.

Insert the color sample tubes and testing tubes and continue testing.

Parts List:

29250-Tube F15T8/D 15 watt Daylight Florescent bulb

29250-Starter Universal starter for Florescent Ballast

29250-fuse 1 amp 250 volt AGC glass fuse

29250-cord 115/250 VAC CEC appliance cord, 3 meters long

29250-carriage Nessler tube carriage assembly complete (no sub parts offered)

