

# Characteristics of Color Film Soundtracks

## A Survey by the SMPTE Color Committee

The SMPTE Color Committee, under the chairmanship of Alan M. Gundelfinger, conducted a survey of the type of optical or photographic soundtracks used in the production of color motion pictures. A similar report was published in the March, 1950, *Journal*. This report was also a project of the Color Committee at that time.

The report published here was prepared by F. P. Herrnfeld, chairman of the subcommittee which gathered the information.

The Society wishes to thank all of the film manufacturers who participated by submitting their data and making this material available.—*Alex E. Alden*, Staff Engineer.

Product Name or Designation	8, 16, 35 65 or 70mm	Appearance	Composition	Relative Transmission to					Preference: density or area
				Infrared†	640	560	460	Ultraviolet	
Agfacolor-Positivfilm	16 & 35mm	Yellow-brown	Dye and silver	(Same as black and white)					No preference
Agfacolor CPS 3	16 & 35mm	Blue	Dye and silver	8%	2.2%	0.01%	2.7%	none	Variable area
Agfacolor CP	16 & 35mm	Blue	Dye and silver	2.1%	1.5%	0.7%	0.01%	none	Variable area
AnSCO FPC-127	16mm	Gray	Silver	Not available					Density
AnSCO T-244	16mm	Dark brown	Silver sulfide	Not available					Density
AnSCO T-238	16mm	Light yellow	Silver sulfide iodide	Not available					Density
Ferraniacolor Duplicating Reversal	2 × 8mm 16 & 35mm	Black	Silver only	Not available					No preference
Ferraniacolor Printing Film	2 × 8mm 16 & 35mm	Black	Silver + dye	Not available					No preference
Fujicolor*	16 & 35mm	Dark-blue	Dye & silver	14	13	19	15	none	No preference
Gevacolor Positive Type 953	16 & 35mm	Blue-black	Dye & silver	Not available					By preference Variable area
Gevacolor Duplicating Reversal T.900.									
Method 1 from neg track	16mm	Neutral	Silver	Same as for T.953					By preference Variable area
Method 2 from pos track	16mm	Brownish	Generally pure silver sulfide	Not available					By preference Variable area
Eastman Color Print Film, 5385 and 7385	16 & 35mm	Dark purple	Silver plus cyan & mag. dyes	Mod.‡	Low	Low	Low	Low	No preference
Eastman Reversal Color Print Film, 5269	16mm	Neutral	Silver only	Mod.	Mod.	Mod.	Mod.	Mod.	No preference
Ektachrome Duplicating Film, 7386									
Method 1	16 & 35mm	Neutral	Dye	High	Low	Low	Low	Low	Variable area
Method 2	16 & 35mm	brownish	Silver sulfide	Mod.	Low	Low	Low	Low	No preference
Sakura Cinefilm Color Positive 04125 04325	16 & 35mm	Bluish black	Dye only or Dye plus silver	none	none	none	Low	Low	No preference

\* 1 Relative transmission measured by S-1 phototube. † IR measured at shorter edge of wave-length at 700 mu. ‡ Moderate.