

## Ultimate 08C holographic recording material

<b>Product description</b>	Ultimate 08C is a high speed and very high resolution holographic silver halide photo material which has been designed to meet most requirements of holographs for 3-colors or blue holography. It is the recommended material for a three 20 mW lasers set-up. The grain is so fine (08nm) that any visible wavelength can be recorded without any diffusion. Despite the fine grain, the sensitivity is much higher than any concurrent material for color holography. The material can be sensitized to any laser line (please contact us for your specific wavelength). You can use an attenuated green LED safe light in the laboratory, for a comfortable work (ajust the intensity so that you can see clearly what you are doing). Both transmission and reflection holograms can be recorded, with a perfect noise free rendition. Both continuous and pulsed lasers (in holoprinters) can be used on this material. Due to the high contrast of the material, the diffraction efficiency (brightness of the hologram) is always high, even for Denisyuk holography or set-up with poor Object/Ref ratio (10:1).
<b>Applications</b>	Full color holography when using low power (20 mW or less) lasers
<b>Color Sensitivity</b>	Any visible or IR wavelength depending on the dyes added during the manufacturing process. The material is isopanchromatic in the range of 440-540nm and 610-650nm for the VICOL version. When a deep red dye (DR) is added the material becomes sensitive to the range of 660-700nm. The color material containing this dye is called DECOL.
<b>Grain size</b>	08nm
<b>Resolution</b>	>10000 lines/mm
<b>Recommended Exposure Energy</b>	Full color holography (3 colors) : 120 $\mu\text{J}/\text{cm}^2$ per color Starting ratio per wavelength 1:1:1 2 colors holography : 150 $\mu\text{J}/\text{cm}^2$ Monochrom holography : 200 $\mu\text{J}/\text{cm}^2$ (standard) to 300 $\mu\text{J}/\text{cm}^2$ (for mastering with wider bandwidth)
<b>Diffraction efficiency</b>	Up to 98% (reflection 0° mirrors)
<b>Base</b>	Glass plates (3mm) or triacetate 190 $\mu\text{m}$
<b>Laser Suitability:</b> (we have tested our material with all of these lasers)	Laser diodes: 639-700nm, Ruby: 694nm , HeNe: 633nm Krypton: 647, 676 nm Nd-yag: 532nm Argon: 457, 476, 488, 514nm DPSS 473nm , DPSS 457nm, HeCd: 442nm
<b>Safe Light</b>	Green LED for any red sensitive (including color) material with intesity ajusted for a comfortable work High power Red LED for any blue or green only sensitive material
<b>Recommended Processing Chemicals</b>	<b>Ultimate safe developer</b> at 20°C (68°F) during 6 minutes, or at 25°C (77°F) during 4 minutes Wash <b>Ultimate safe bleach</b> until the film is totally clear Wash Final rinse with some drops of wetting agent (photoflo), then vertical drying

<b>Handling recommendations</b>	Use examination gloves when handling the material before recording to avoid humidity transfer to the gelatin, finger prints and to protect yourself (the glass plates have sharp edges).
<b>Shelf Life</b>	More than 5 years at 4°C. 1 to 2 months at 25°C.
<b>Storage</b>	In a fridge, in a closed box at 4°C
<b>Use Recommendation</b>	Transfer the plates /films you plan to use for the day in a safe box and place it in the recording room at least one hour before shooting, for temperature stabilisation.