

Ultimate 04 holographic recording material

Product description	Ultimate 04 is a medium speed holographic silver halide photo material with the highest resolution on the market, specially designed for 3-colors Denisyuk holography and Hoe's applications. It is the recommended material for a three 20 mW or more lasers set-up. The ultrafine grain (04nm) allows ultra bright and totally noise free recordings in the blue region. 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 (adjust the intensity so that you can see clearly what you are doing). Due to the high contrast of the material, the diffraction efficiency (brightness of the hologram) is always very high in Denisyuk holography.
Applications	Full color Denisyuk holography when using lasers with powers higher than 20 mW
Color Sensitivity	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.
Grain size	04nm
Resolution	>10000 lines/mm
Recommended Exposure Energy	Full color holography (3 colors) : 200 $\mu\text{J}/\text{cm}^2$ per color Starting ratio per wavelength 1:1:1 Monochrome holography : 400 $\mu\text{J}/\text{cm}^2$
Diffraction efficiency	Up to 98% (reflection 0° mirrors)
Base	Glass plates (3mm) or triacetate 190 μm
Safe Light	Green LED for any red sensitive (including color) material with intensity adjusted for a comfortable work High power Red LED for any blue or green only sensitive material
Recommended Processing Chemicals	Ultimate safe developer at 20-25°C (68-77°F) during 4 minutes Wash Ultimate safe bleach until the film is totally clear Wash Final rinse with some drops of wetting agent (photoflo), then vertical drying
Handling recommendations	Use examination gloves when handling the material before recording to avoid humidity transfer to the gelatine, finger prints and to protect yourself (the glass plates have sharp edges).
Shelf Life	More than 5 years at 4°C. Several months at 25°C.
Storage	In a fridge, in a closed box at 4°C
Use Recommendation	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.