

Application Bulletin

UVP-AB-104

Corporate Headquarters: UVP, Inc. 2066 W. 11th Street, Upland, CA 91786 Tel: (800)452-6788 * (909)946-3197

E-Mail: uvp@uvp.com

European Operations: Ultra-Violet Products Ltd., Unit 1, Trinity Hall Farm Estate, Nuffield Rd
Cambridge CB4 1TG UK Tel: +44(0)1223-420022

E-Mail: uvp@uvp.co.uk

USE OF ULTRAVIOLET LIGHT IN POLYESTER IDENTIFICATION

APPLICATION: Polyester Identification

WAVELENGTHS/LAMPS Longwave 365nm Ultraviolet

USED: Models ML-49, B-100AP, UVL-56

FIELD OF USE: Garment Industry

BACKGROUND: Identification of polyester in yarn stock and finished yarn (ready to be used

for clothing manufacture) is important to yarn producers and garment makers because fabric dyes are specific for certain fabrics. For example, if a piece of material is made of a yarn presumed to be 100% cotton but is actually a cotton/polyester blend, the material will have an uneven appearance after it is dyed because the polyester will not absorb the cotton dye. In this example it would be advantageous for the end user to realize polyester presence before manufacturing the garment. Similarly, yarn producers need to identify raw stock before beginning production to insure fabric consistency.

PROCEDURE: Polyester identification is easily performed by illuminating the suspect yarn

or cloth with a UVP longwave lamp. Presence of polyester is indicated by a shiny white fluorescence. The UVP ML-49 (battery operation) or UVP UVL-56 (115V or 220V) work well in low-light conditions. The ML-49 is recommended for situations that require portability due to its battery operation. The high-intensity B-100AP is excellent for inspection in well lit areas.

PRIMARY ADVANTAGES

OF THE METHOD: Identification of polyester before yarn or garment production begins is nec-

essary to eliminate wasted time and money resulting from a contaminated production run. UVP's longwave ultraviolet lamps enable the manufacturer

to quickly spot polyester presence before it becomes a problem.