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Article: Addendum to Guidelines for Care and Identification of Film—Base Photographic Materials

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## **Identification of Film–Base Photographic Materials: Flow Chart** Andrew Robb 1995

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The flow chart on the following page supplements “Guidelines for Care & Identification of Film–Base Photographic Materials,” *Topics in Photographic Preservation*, volume 5, 1993, by Monique Fischer and Andrew Robb. For best results, please refer to the background information and detailed instructions contained in that publication.

# Identification of Film–Base Photographic Materials: Flow Chart

This flow chart is designed to introduce film–base identification to those with little or no experience in this important preservation activity. Definite identification is often difficult even for experienced examiners, particularly of film–base materials in excellent condition. A reference collection of known film–base samples in various deterioration levels can be an invaluable resource. *Even if identification is uncertain, badly deteriorated film–base materials should be isolated from those in good condition.*

The identification procedures listed in this chart are divided into two categories, Examination and Destructive Testing. It is important to consider carefully your reasons for conducting a destructive test.

Please refer to "The Guidelines for Care and Identification of Film–Base Photographic Materials," *Topics in Photographic Preservation*, volume 5, for further information.

For each identification procedure mark the box that best describes your observations/results, and proceed according to the symbol following your selection. An arrow (→) means that identification is uncertain and the examiner should continue to the next step. A triangle (▼) means that identification is likely, but not certain, and further examination or testing should be considered. A square (■) indicates that the film–base is firmly identified.

Use ① to differentiate polyester from nitrate and acetates.  
Use ②–⑦ to differentiate nitrate from acetates.

## Examination

### ① Polarization Test

- |   |           |   |
|---|-----------|---|
| <input type="checkbox"/> red or green interference colors | Polyester | ■ |
| <input type="checkbox"/> no colors / uncertain            |           | → |

### ② Edge Printing

- |   |          |   |
|---|----------|---|
| <input type="checkbox"/> "Nitrate"        | Nitrate  | ■ |
| <input type="checkbox"/> "Safety"         | Acetates | ■ |
| <input type="checkbox"/> none / uncertain |          | → |

### ③ Dating Information

- |                                      |          |   |
|--------------------------------------|----------|---|
| <input type="checkbox"/> before 1920 | Nitrate  | ■ |
| <input type="checkbox"/> 1920–55     |          | → |
| <input type="checkbox"/> after 1955  | Acetates | ▼ |
| <input type="checkbox"/> uncertain   |          | → |

### ④ Notch Codes

For the two choices below, all three conditions must be met for definite identification; if not go to ⑤.

- |  |                                |                                   |          |   |
|--|--------------------------------|-----------------------------------|----------|---|
| <input type="checkbox"/> "V" 1st notch from edge             | <input type="checkbox"/> Kodak | <input type="checkbox"/> pre–1949 | Nitrate  | ■ |
| <input type="checkbox"/> "U" 1st notch from edge             | <input type="checkbox"/> Kodak | <input type="checkbox"/> 1925–49  | Acetates | ■ |
| <input type="checkbox"/> neither of the previous two choices |                                |                                   |          | → |

### ⑤ Deterioration Characteristics

- |  |          |   |
|--|----------|---|
| <input type="checkbox"/> none / uncertain        |          | → |
| <input type="checkbox"/> noxious smell           | Nitrate  | ■ |
| <input type="checkbox"/> vinegar smell           | Acetates | ■ |
| <input type="checkbox"/> yellowing               | Nitrate  | ▼ |
| <input type="checkbox"/> soft / sticky / adhered | Nitrate  | ▼ |
| <input type="checkbox"/> bubbles / crystals      | Acetates | ▼ |
| <input type="checkbox"/> channelling             | Acetates | ■ |

## Destructive Testing

*Do not conduct destructive testing unless you have been given proper instruction—you can harm yourself as well as your collection.*

### ⑥ Diphenylamine or Float Test

For materials in good condition either test is usually sufficient. Materials in poor condition may give misleading results.

#### Diphenylamine

- |  |          |   |
|--|----------|---|
| <input type="checkbox"/> intense blue          | Nitrate  | ■ |
| <input type="checkbox"/> faint blue / no color | Acetates | ■ |
| <input type="checkbox"/> uncertain             |          | → |

#### Float

- |                                    |          |   |
|------------------------------------|----------|---|
| <input type="checkbox"/> top       | Acetates | ■ |
| <input type="checkbox"/> bottom    | Nitrate  | ■ |
| <input type="checkbox"/> uncertain |          | → |

### ⑦ Burn Test

- |  |          |   |
|--|----------|---|
| <input type="checkbox"/> burns down, yellow flame          | Nitrate  | ■ |
| <input type="checkbox"/> difficult to ignite, burns slowly | Acetates | ■ |



Continue Identification



Likely Identification



Definite Identification