

DANCHEK AD STRIP

TECHNICAL DATA SHEET

Acidity Tester · Vinegar Syndrome Detection

1. PRODUCT IDENTIFICATION

Parameter	Specification
Product name	DANCHEK AD STRIP
Designation	A-D Strips® test strips (Danchek)
Main use	Non-destructive diagnosis of Vinegar Syndrome (acid degradation) in acetate film
Application	Detection of acidity released into the confined air surrounding acetate-based photographic and motion-picture film
Principle	Chemical indicator sensitive to acetic acid vapours

2. PRODUCT DESCRIPTION AND OPERATING PRINCIPLE

DANCHEK AD STRIP It is a highly sensitive acid-base indicator strip designed to detect the acidity released by acetate films and other materials during the degradation process known as "Vinegar Syndrome."

When it reacts with acetic acid vapours present in the confined air surrounding the film, the indicator progressively changes colour, allowing the level of deterioration of the material to be assessed using a reference card.

3. TECHNICAL SPECIFICATIONS

Characteristic	Specification
Chemical reagent	Bromocresol green (sodium salt)
Initial colour	Blue
Colour progression	Blue → green → yellow, depending on the acidity level
Strip dimensions	1 × 4 cm
Specified packaging	250 strips per pack
Shelf life	5 years from the date of purchase, provided the original factory-sealed packaging is maintained
Sensitivity	Light-sensitive reagent; avoid prolonged exposure to ambient light
Storage	Cool place, at a temperature below 25 °C (77 °F)
Packaging	Resealable polyethylene bag inside an opaque outer bag
Reference card	Control card / colour scale
Control-card languages	Spanish, English, French and German
Safety / toxicity	The technical draft states that the reagent is non-toxic and soluble in water and alcohol. If it becomes wet, the reagent may run.

4. EXPOSURE AND READING TIMES

The time required to obtain a reliable reading depends on the temperature of the test area. The times indicated below correspond to a relative humidity of 30–50%.

Test-area temperature	Minimum exposure time
Room temperature	24 hours
55 °F / 13 °C	1–2 weeks
41 °F / 5 °C	3 weeks
35 °F / 2 °C	4 weeks
25 °F / −4 °C	6 weeks

For visual comparison, remove the strip and compare it with the reference card under cool white light. The reading must be taken immediately after removal.

5. INTERPRETATION SCALE AND RECOMMENDED ACTIONS

Level	Free acidity (mL 0.1 N NaOH/g)	Film condition	Recommended action
0	pH 6,0	Good: no significant deterioration.	Cool or cold storage.
0.5–1	pH 5,0	Fair to good: deterioration beginning.	Cold storage. Periodic inspection.
1.5	pH 4,8	Autocatalytic point: onset of rapid degradation.	Cold storage or freezing. Prioritize for duplication.
2–2.5	pH 4,2	Poor: active degradation.	Freeze to stop deterioration. Duplication is recommended.
3	pH 4,0	Critical: imminent shrinkage and distortion. Handling risk.	Freeze immediately. Urgent duplication.

6. RECOMMENDED MONITORING FREQUENCY

Once an acidity level of **1.5** has been detected, it is recommended that the collection be reassessed at the following frequency:

Storage condition	Minimum indicated frequency
Room temperature	At least every 2 years **(NORMAL)**
Cool environment	At least every 5 years
Cold environment	At least every 10 years
Freezing	At least every 25 years

7. INSTRUCTIONS FOR USE

1. Place the strip directly onto the film inside a container or an airtight sealed bag.

2. Leave the strip exposed for the duration corresponding to the temperature of the test area.

3. Remove the strip and immediately compare its color with the reference card under cool white light.

4. Record the color/acidity level obtained and implement the recommended actions for the detected level.

8. STORAGE, REUSE AND RECORD KEEPING

The strips must not be reused. Even if they apparently return to blue, they lose their accuracy.

If a strip is to be retained as physical evidence of the analysis, cover it completely with transparent plastic tape and store it in darkness.

9. LIMITATIONS OF USE

The strips are not considered quantitatively accurate for nitrate or polyester film. Before making duplication or preservation decisions, it is recommended that the film base be identified.

10. PRECAUTIONS

The technical documentation provided refers primarily to acetate film and the diagnosis of Vinegar Syndrome. Preservation and action recommendations should be applied taking into account the actual conditions of the collection and the material being assessed.