

October 1967

Brief 67-10409

NASA TECH BRIEF



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Scribable Coating for Plastic Films

The problem:

To provide a scribable, opaque coating for transparent plastic film tape. The coating must not be affected by aging, vacuum, and moderate temperature extremes.

The solution:

A coating consisting of titanium dioxide (white pigment), a water-compatible acrylic polymer emulsion (binder), and a detergent (e.g., a potassium or sodium soap).

How it's done:

The ingredients are blended with deionized water and the resultant mixture is filtered through a silk screen. By means of a spraygun, the filtrate is sprayed onto one surface of the plastic film to a thickness of approximately 0.0005 inch. The coated film is air-dried for 1 hour and then vacuum-baked for 12 hours. The resultant coating is flexible, durable, and can readily be inscribed with a stylus to provide a permanent record of any desired data.

Notes:

1. The coating mixture can be readily dispersed in water before it is dried. This feature facilitates cleanup of materials and equipment after the work is completed.
2. The coating is applied to the backside of gelatin-coated films.
3. Inquiries concerning this coating may be directed to:

Technology Utilization Officer
Manned Spacecraft Center
Houston, Texas 77058
Reference: B67-10409

Patent status:

Inquiries about obtaining rights for the commercial use of this invention may be made to NASA, Code GP, Washington, D.C. 20546.

Source: Roger T. Clark
of North American Aviation, Inc.
under contract to
Manned Spacecraft Center
(MSC-11194)

Category 03