

Tentative Specifications for

CELLULOSE NITRATE (PYROXYLIN) PLASTIC SHEETS, RODS, AND TUBES¹



A.S.T.M. Designation: D 701 - 46 T

ISSUED, 1943; REVISED, 1944, 1946.²

These Tentative Specifications have been approved by the sponsoring committee and accepted by the Society in accordance with established procedures, for use pending adoption as standard. Suggestions for revisions should be addressed to the Society at 1916 Race St., Philadelphia 3, Pa.

Scope

1. These specifications cover sheets, rods, and tubes made of cellulose nitrate (pyroxylin) plastics, plasticizers, and stabilizers, pigments and dyes, as required.

NOTE.—The properties included in these specifications are those required to identify the types and grades of materials covered. There may be other requirements necessary to identify particular characteristics. These will be added to the specifications as their inclusion becomes generally desirable and the necessary test data and methods become available.

Type

2. These specifications cover sheets, rods, and tubes made of the following four types of cellulose nitrate plastic:

Type I.—General purpose, transparent,

Type II.—Improved toughness, transparent,

Type III.—General purpose, pigmented, and

Type IV.—Improved toughness, pigmented.

General Requirements

3. (a) The material shall be of uniform composition and so compounded as to conform to the requirements prescribed in these specifications.

(b) The size, shape, dimensional tolerances, surface finish, and color shall be as specified by the purchaser in the contract or order.

Detail Requirements

4. (a) *Cellulose Nitrate.*—The cellulose nitrate used in the production of cellulose nitrate plastic shall have a nitrogen content of 10.65 to 11.25 per cent. It shall be thoroughly purified and shall have an A.S.T.M. stability at 134.5 C. (275 F.) of not less than 30 min.

(b) *Composition.*—Cellulose nitrate plastic shall be manufactured from approved cellulose nitrate (Paragraph (a)) with suitable plasticizers, or from reworked material having an acidity not greater than 25 epm. (Note 1, Section 6) and a fuming-off temperature of not less

¹ Under the standardization procedure of the Society, these specifications are under the jurisdiction of the A.S.T.M. Committee D-20 on Plastics.

By publication of these specifications, the American Society for Testing Materials does not undertake to insure anyone utilizing the specifications against liability for infringement of Letters Patent nor assume any such liability, and such publication should not be construed as a recommendation of any patented or proprietary application that may be involved.

² Latest revision accepted by the Society at annual meeting, June, 1946.