

Tentative Method of Test for

IMPACT RESISTANCE OF PLASTICS AT SUBNORMAL AND SUPERNORMAL TEMPERATURES¹



A.S.T.M. Designation: D 758 - 44 T

ISSUED, 1944.²

This Tentative Method has 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. This method of test is intended for use in determining impact resistance of organic plastics under conditions of low moisture content at temperatures above and below the standard laboratory temperature.

Apparatus

2. The apparatus shall consist of the following:

(a) *Testing Machine*.—The testing machine and its accessory equipment shall conform to the requirements specified in the Tentative Methods of Test for Impact Resistance of Plastics and Electrical Insulating Materials (A.S.T.M. Designation: D 256).³ For tests at low temperatures, care shall be taken that the testing machine operates in the usual manner. This may be accomplished by washing out the oil used as a lubricant and replacing it with kerosine. A change of not greater than 50 per cent in the

windage and friction corrections is permissible.

(b) *Insulated Test Chamber*.—An insulated test chamber, through which air is circulated at the desired temperature, to enclose the entire testing machine during the test (Note). The chamber shall be equipped with a window through which may be read the scale and the thermometer near the specimen, and a door for inserting the specimens. Means shall be provided outside the test chamber for tripping the hammer of the impact machine. In the case of cantilever beam (Izod type) impact tests, external means shall also be provided for tightening the vise (see Note, Section 5). The equipment shall be capable of maintaining the test temperature within plus or minus 2 C. of the specified temperature at the location of the thermometer near the test specimen, and a difference in temperature between the inlet and outlet duct thermometers of not greater than 5 C. at equilibrium.

NOTE.—For detailed requirements covering enclosures for testing machines and servicing units for maintaining the desired temperature and conditions, reference should be made to the

¹ Under the standardization procedure of the Society, this method is under the jurisdiction of the A.S.T.M. Committee D-20 on Plastics.

² Accepted by Committee E-10 on Standards, January 19, 1944.

³ Appears in this publication, see Contents in Numeric Sequence of A.S.T.M. Designations at front of book.