



Designation: D 1539 – 60 (Reapproved 1998)

AMERICAN SOCIETY FOR TESTING AND MATERIALS
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Standard Specification for Dehydrated Castor Acids¹

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1. Scope

1.1 This specification covers acids produced from dehydrated castor oil. Two types are covered as follows:

- 1.1.1 *Type I*—Distilled dehydrated castor acids.
- 1.1.2 *Type II*—Undistilled dehydrated castor acids.

2. Referenced Documents

2.1 ASTM Standards:

- D 1358 Test Method for Spectrophotometric Diene Value of Dehydrated Castor Oil and Its Derivatives²
- D 1467 Guide for Testing Fatty Acids Used in Protective Coatings²
- D 1544 Test Method for Color of Transparent Liquids (Gardner Color Scale)³
- D 1959 Test Method for Iodine Value of Drying Oils and Fatty Acids²

¹ This specification is under the jurisdiction of ASTM Committee D-1 on Paint and Related Coatings, Materials, and Applications and is the direct responsibility of Subcommittee D01.32 on Drying Oils.

Current edition approved Sept. 19, 1960. Originally issued 1958. Replaces D 1539 – 58 T.

² *Annual Book of ASTM Standards*, Vol 06.03.

³ *Annual Book of ASTM Standards*, Vol 06.01.

TABLE 1 Requirements for Dehydrated Castor Acids

	ASTM Test Method	Type I	Type II
Acid value	D 1980	195 to 200	187 to 195
Saponification value	D 1962	195 to 200	193 to 199
Iodine value	D 1959	150 to 156	138 to 143
Color, Gardner	D 1544	1 max	5 to 8
Spectrophotometric diene value	D 1358	28 to 35	25 to 32

D 1962 Test Method for Saponification Value of Drying Oils, Fatty Acids, and Polymerized Fatty Acids²

D 1980 Test Method for Acid Value of Fatty Acids and Polymerized Fatty Acids²

3. Properties

3.1 Dehydrated castor acids shall conform to the following requirements given in Table 1.

4. Test Methods

4.1 The properties enumerated in this specification shall be determined in accordance with Methods D 1467, except that the spectrophotometric diene value shall be determined in accordance with Test Method D 1358.

5. Keywords

5.1 castor fatty acids; castor oil; dehydrated castor acids

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