



Standard Specification for Fractionated and Distilled Cottonseed Fatty Acids¹

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1. Scope

1.1 This specification covers distilled acids derived from cottonseed oil. Three types are covered as follows:

1.1.1 *Type I*—Highly fractionated fatty acids usually produced from recovered cottonseed oil.

1.1.2 *Type II*—Fractionated fatty acids usually produced from recovered cottonseed oil.

1.1.3 *Type III*—Usually produced from recovered cottonseed oil.

2. Referenced Documents

2.1 ASTM Standards:

D 1467 Guide for Testing Fatty Acids Used in Protective Coatings²

D 1544 Test Method for Color of Transparent Liquids (Gardner Color Scale)³

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.

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

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

D 1959 Test Method for Iodine Value of Drying Oils and Fatty Acids²

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

D 1965 Test Method for Unsaponifiable Matter in Drying Oils, Fatty Acids, and Polymerized Fatty Acids²

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

D 1982 Test Method for Titer of Fatty Acids²

3. Properties

3.1 Fractionated and distilled cottonseed fatty acids shall conform to the requirements in Table 1.

4. Test Methods

4.1 The properties enumerated in this specification shall be determined in accordance with Methods D 1467.

5. Keywords

5.1 cottonseed oil; fatty acids



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TABLE 1 Requirements for Distilled Cottonseed Fatty Acids

| | ASTM Test Method | Type I | Type II | Type III |
|-------------------------------|------------------|------------|------------|------------|
| Acid value | D 1980 | 195 to 201 | 106 to 204 | 199 to 205 |
| Saponification value | D 1962 | 197 to 203 | 198 to 206 | 201 to 207 |
| Unsaponifiable matter, max, % | D 1965 | 1.00 | 1.50 | 1.50 |
| Iodine value | D 1959 | 140 to 145 | 120 to 130 | 95 to 110 |
| Color, Gardner, max | D 1544 | 2 | 5 | 8 |
| Titer, °C | D 1982 | 5 max | 25 max | 32 to 38 |

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