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# **Standard Specification for** Distilled Linseed Fatty Acids<sup>1</sup>

This standard is issued under the fixed designation D 1538; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon  $(\epsilon)$  indicates an editorial change since the last revision or reapproval.

## 1. Scope

- 1.1 This specification covers distilled acids derived from the distillation of linseed oil. Two types are covered as follows:
- 1.1.1 Type I—Usually produced from degummed linseed oil and referred to as water white linseed fatty acids.
- 1.1.2 Type II—Usually produced from recovered linseed oil and referred to as regular distilled linseed fatty acids.

#### 2. Referenced Documents

- 2.1 ASTM Standards:
- D 1467 Guide for Testing Fatty Acids Used in Protective Coatings<sup>2</sup>
- D 1544 Test Method for Color of Transparent Liquids (Gardner Color Scale)<sup>3</sup>
- D 1959 Test Method for Iodine Value of Drying Oils and Fatty Acids<sup>2</sup>

- D 1965 Test Method for Unsaponifiable Matter in Drying Oils, Fatty Acids, and Polymerized Fatty Acids<sup>2</sup>
- D 1980 Test Method for Acid Value of Fatty Acids and Polymerized Fatty Acids<sup>2</sup>
- D 1982 Test Method for Titer of Fatty Acids<sup>2</sup>

# 3. Properties

3.1 Distilled linseed fatty acids shall conform to the following requirements:

	ASTM Test		
	Methods	Type I	Type II
Acid value	D 1980	197 to 204	195 to 202
Saponification value	D 1962	197 to 204	195 to 202
Unsaponifiable matter, max, %	D 1965	1.0	2.0
lodine value, min	D 1959	179	155
Color, Gardner, max	D 1544	3	7
Titer. °C	D 1982	17 to 20	19 to 25

### 4. Test Methods

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

#### 5. Keywords

5.1 linseed fatty acids; linseed oil
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D 1962 Test Method for Saponification Value of Drying Oils, Fatty Acids, and Polymerized Fatty Acids<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> 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 D01.32on Drying Oils.

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<sup>&</sup>lt;sup>2</sup> Annual Book of ASTM Standards, Vol 06.03.

<sup>&</sup>lt;sup>3</sup> Annual Book of ASTM Standards, Vol 06.01.