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# Standard Specification for Boiled Linseed Oil<sup>1</sup>

This standard is issued under the fixed designation D 260; 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.

This standard has been approved for use by agencies of the Department of Defense.

### 1. Scope

- 1.1 This specification covers two types of boiled linseed oil:
- 1.1.1 Type I, Regular Boiled, and
- 1.1.2 Type II, Double Boiled.

#### 2. Referenced Documents

- 2.1 ASTM Standards:
- D 564 Test Methods for Liquid Paint Driers<sup>2</sup>
- D 1475 Test Method for Density of Liquid Coatings, Inks, and Related Products<sup>2</sup>
- D 1544 Test Method for Color of Transparent Liquids (Gardner Color Scale)<sup>2</sup>
- D 1639 Test Method for Acid Value of Organic Coating Materials<sup>3</sup>
- D 1951 Test Method for Ash in Drying Oils and Fatty Acids<sup>3</sup>

- D 1959 Test Method for Iodine Value of Drying Oils and Fatty Acids<sup>3</sup>
- D 1960 Test Method for Loss on Heating of Drying Oils<sup>3</sup>
- D 1962 Test Method for Saponification Value of Drying Oils, Fatty Acids, and Polymerized Fatty Acids<sup>3</sup>
- D 1963 Test Method for Specific Gravity of Drying Oils, Varnishes, Resins, and Related Materials at 25/25°C<sup>3</sup>
- D 1965 Test Method for Unsaponifiable Matter in Drying Oils, Fatty Acids, and Polymerized Fatty Acids<sup>3</sup>
- D 2090 Test Method for Clarity and Cleanness of Paint and Ink Liquids<sup>3</sup>

### 3. Properties

3.1 Boiled linseed oil shall conform to the requirements shown in Table 1.

## 4. Test Methods

4.1 The properties enumerated in this specification shall be determined in accordance with the appropriate ASTM methods given in Table 1.

#### 5. Keywords

5.1 boiled linseed oil; linseed oil

D 1953 Test Method for Drying Properties of Drying Oils<sup>4</sup>

<sup>&</sup>lt;sup>4</sup> Discontinued; see 1980 Annual Book of ASTM Standards, Part 29.

<sup>&</sup>lt;sup>1</sup> This specification is under the jurisdiction of ASTM Committee D01 on Paint and Related Coatings, Materials, and Applications, and is the direct responsibility of Subcommittee D01.32 on Drying Oils.

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<sup>&</sup>lt;sup>2</sup> Annual Book of ASTM Standards, Vol 06.01.

<sup>&</sup>lt;sup>3</sup> Annual Book of ASTM Standards, Vol 06.03.

### **TABLE 1 Physical Properties**

	Type I	Type II	ASTM Methods
	0.928 to 0.938	0.930 to 0.945	D 1963, D 1475
Specific gravity, 25/25°C			
Acid value, max	7.5	8.0	D 1639
Saponification value	189 to 195	190 to 198	D 1962
Unsaponifiable matter, max, %	1.5	1.5	D 1965
lodine value (Wijs), min	170	165	D 1959
Loss on heating at 105 to 110°C, max, %	0.4	0.6	D 1960
Appearance at 65°C	clear and transparent	clear and transparent	D 2090
Gardner color, max	15, approximately	15, approximately	D 1544
Set-to-touch time, max, h	16	8	D 1953
Ash, max, %	0.50	0.60	D 1951, D 564

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