Designation: D 260 – 86 (Reapproved 2001)

Standard Specification for Boiled Linseed Oil[1]

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 (ε) 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[2]

D 1475 Test Method for Density of Liquid Coatings, Inks, and Related Products[2]

D 1544 Test Method for Color of Transparent Liquids (Gardner Color Scale)[2]

D 1639 Test Method for Acid Value of Organic Coating Materials[3]

D 1951 Test Method for Ash in Drying Oils and Fatty Acids[3]

D 1953 Test Method for Drying Properties of Drying Oils[4]

D 1959 Test Method for Iodine Value of Drying Oils and Fatty Acids[3]

D 1960 Test Method for Loss on Heating of Drying Oils[3]

D 1962 Test Method for Saponification Value of Drying Oils, Fatty Acids, and Polymerized Fatty Acids[3]

D 1963 Test Method for Specific Gravity of Drying Oils, Varnishes, Resins, and Related Materials at 25/25°C[3]

D 1965 Test Method for Unsaponifiable Matter in Drying Oils, Fatty Acids, and Polymerized Fatty Acids[3]

D 2090 Test Method for Clarity and Cleanness of Paint and Ink Liquids[3]

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

[1] 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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[2] *Annual Book of ASTM Standards,* Vol 06.01.

[3] *Annual Book of ASTM Standards,* Vol 06.03.

[4] Discontinued; see *1980 Annual Book of ASTM Standards,* Part 29.

TABLE 1 Physical Properties

	Type I	Type II	ASTM Methods
Specific gravity, 25/25°C	0.928 to 0.938	0.930 to 0.945	D 1963, D 1475
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
Iodine 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