



Standard Specification for High-Gravity Glycerin¹

This standard is issued under the fixed designation D1257; 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.

1. Scope*

1.1 This specification covers high-gravity glycerin (98.7 weight %, minimum) for use in the manufacture of alkyd and other synthetic resins.

1.2 The following applies to all specified limits in this standard; for purposes of determining conformance with this standard, an observed value or a calculated value, shall be rounded off “to the nearest unit” in the last right-hand digit used in expressing the specification limit, in accordance with the rounding-off method of Practice E29.

1.3 The values stated in SI units are to be regarded as the standard. The values given in parentheses are for information only.

1.4 For specific hazard information and guidance, see the supplier’s Material Safety Data Sheet for materials listed in this specification.

2. Referenced Documents

2.1 *ASTM Standards*:²

D1258 Test Methods for High-Gravity Glycerin (Withdrawn 2011)³

E29 Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications

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 D01.35 on Solvents, Plasticizers, and Chemical Intermediates.

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard’s Document Summary page on the ASTM website.

³ The last approved version of this historical standard is referenced on www.astm.org.

2.2 *U.S. Federal Standard*:

PPP-C-2020 Chemicals, Liquid, Dry, and Paste: Packaging of⁴

3. Properties

3.1 The glycerin shall conform to the following requirements:

Apparent specific gravity, min:

15.6/15.6°C (60/60°F)	1.2620
	or
25/25°C	1.2587
Color, Pt-Co scale, max	20
Sulfate ash, max, weight %	0.1
Acid value, max, mg KOH per g of material	0.3

4. Test Methods and Sampling

4.1 The material shall be sampled and the properties enumerated in this specification determined in accordance with Test Method D1258.

5. Packaging and Package Marking

5.1 Package size to be agreed upon between the purchaser and supplier.

5.2 Packaging shall conform to applicable carrier rules and regulations or when specified shall conform to Fed. Spec. PPP-C-2020.

6. Keywords

6.1 high-gravity glycerin

⁴ Available from Standardization Documents Order Desk, DODSSP, Bldg. 4, Section D, 700 Robbins Ave., Philadelphia, PA 19111-5098, http://www.dodssp.daps.mil.

*A Summary of Changes section appears at the end of this standard