



Designation: D1076 – 21

Standard Specification for Rubber—Concentrated, Ammonia Stabilized, Creamed, and Centrifuged Natural Latex¹

This standard is issued under the fixed designation D1076; 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 requirements for first grade concentrated natural rubber latex (see [Table 1](#)) of the following categories:

Category 1—Centrifuged *Hevea* natural latex stabilized with ammonia only.

Category 2—Creamed *Hevea* natural latex stabilized with ammonia only.

Category 3—Centrifuged *Hevea* natural latex stabilized with low ammonia.

Category 4—Centrifuged, or centrifuged and creamed, guayule latex, or other natural rubber latex, containing less than 200 µg total protein per gram dry weight of latex, with ammonia or other hydroxide.

Category 5—Centrifuged *Hevea* natural latex treated with aluminum hydroxide or by other means, stabilized with ammonia only containing less than 0.5 % non-rubber content.

1.2 This specification is not necessarily applicable to latices prepared, stabilized, or preserved by other methods, and shall not be construed as limiting the desirability or usefulness of other categories of latices. It does apply to natural latex sources other than *Hevea brasiliensis* but does not apply to compounded latex concentrates.

1.3 The analytical procedures applicable to the specifications are included and appear in the following order:

	Section
Sampling	6 and 7
Total Solids	8
Dry Rubber Content	9
Protein Content	10
Total Alkalinity	11
Viscosity	12
Sludge Content	13
Coagulum Content	14
KOH Number	15
pH	16
Mechanical Stability	17
Copper and Manganese	18

Density	19 – 31
Volatile Fatty Acids	32 – 36
Boric Acid	37
Dry Films	38
Precision for All Test Methods	39

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

1.5 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 *ASTM Standards*:²

[D1278](#) Test Methods for Rubber from Natural Sources—Chemical Analysis

[D4483](#) Practice for Evaluating Precision for Test Method Standards in the Rubber and Carbon Black Manufacturing Industries

[D5712](#) Test Method for Analysis of Aqueous Extractable Protein in Latex, Natural Rubber, and Elastomeric Products Using the Modified Lowry Method

[D6499](#) Test Method for Immunological Measurement of Antigenic Protein in *Hevea* Natural Rubber (HNR) and its Products

[E70](#) Test Method for pH of Aqueous Solutions With the Glass Electrode

3. General Specification Requirements

3.1 In manufacturing, the material shall be processed in accordance with the best commercial practice and shall be of uniform composition.

3.2 The material shall conform to the chemical and physical requirements prescribed in [Table 1](#).

¹ This specification is under the jurisdiction of ASTM Committee D11 on Rubber and Rubber-like Materials and is the direct responsibility of Subcommittee D11.22 on Natural Rubber.

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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.