



Designation: D 803 – 023

Standard Test Methods for Testing Tall Oil¹

This standard is issued under the fixed designation D 803; 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 These test methods cover the test procedures to be applied to whole tall oils or refined tall oils. Previous editions of these test methods have described test procedures that are used to test tall oil fatty acid, rosin, and other tall oil-derived products as well as test crude and refined tall oil. Consequently, these test methods are widely cited in reference books and industry literature for the testing of tall oil-derived products.

1.1.1 In this current revision, procedural details of some of the often-cited test methods have been removed and the test methods consolidated with other existing test methods. In such cases the consolidated methods, applicable to all tall oil-derived products, are referenced.

1.2 The procedures appear in the following order:

Physical Tests	Sections
Viscosity:	
Brookfield Method (Preferred Method)	7
Bubble Time Method	8
~~Pour Point~~	~~9~~
~~Flash Point~~	~~9~~
~~Flash Point~~	~~10~~
~~Color~~	~~10~~
~~Color~~	~~11~~
Moisture:	11
~~Moisture:~~	~~12~~
~~Insoluble Matter~~	~~12~~
~~Insoluble Matter~~	~~13~~
~~Ash~~	~~14~~
~~Ash~~	~~13~~
Chemical Analysis	
~~Acid Number~~	~~17~~
~~Acid Number~~	~~16~~
~~Saponification Number~~	~~18~~
~~Saponification Number~~	~~17~~
~~Rosin Acids~~	~~19~~
~~Rosin Acids~~	~~18~~
~~Unsaponifiable Matter~~	~~20~~
~~Unsaponifiable Matter~~	~~19~~
~~Fatty Acids~~	~~21~~
~~Fatty Acids~~	~~20~~

1.3 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 *ASTM Standards:*

¹ These test methods are under the jurisdiction of ASTM Committee D01 on Paint and Related Coatings, Materials, and Applications and are the direct responsibility of Subcommittee D01.34 on Naval Stores.

Current edition approved May 10, 20023. Published ~~July 2002~~; June 2003. Originally published as D 803 – 44 T; approved in 1944. Last previous edition approved in 2002 as D 803 – 9702.