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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 12005.2-2026

Replacing GB/T 12005.1-1989

Polyacrylamide - Part 2: Determination of properties

聚丙烯酰胺 第2部分：性能测定

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**Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC**

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Foreword

GB/T 12005.2-2026 | Polyacrylamide - Part 2: Determination of properties

GB/T 12005.2-2026 English version. Polyacrylamide - Part

2 Performance Testing Published on 2026-05-

25 Implemented on December 1, 2026 State Administration for Market Regulation The State Administration for Standardization issued a statement.

1.Scope This document describes the methods for determining the general properties of solid polyacrylamide materials, including appearance, intrinsic viscosity, ionicity, particle size, and solid content. Test conditions and determination procedures for acrylamide content, residual acrylamide content, dissolution rate, water-insoluble matter, and viscosity-average molecular weight. This document applies to the performance testing of solid polyacrylamide materials.

4 Performance Measurement

4.1 General Requirements Unless otherwise specified, all reagents used in this document shall be analytical grade, and all water used shall meet the specifications of Grade III water in GB/T 6682. Standard solutions, preparations and products shall be prepared in accordance with the provisions of GB/T 601 and GB/T 603.

4.2 Appearance Take an appropriate amount of sample and visually inspect it under natural light.

4.3 Determination of intrinsic viscosity and viscosity-average molecular weight Proceed as specified in Appendix A.

4.4 Determination of Ionicity The degree of ionization of anionic, nonionic, and amphoteric

polyacrylamides shall be determined according to the provisions of Appendix B; for cationic polyacrylamides... The degree of ionization shall be determined in accordance with the provisions of GB/T 31246.

4.5 Particle size determination Proceed as specified in Appendix C.

4.6 Determination of solid content Proceed as specified in Appendix D.

4.7 Determination of Residual Acrylamide Content Proceed as specified in Appendix E.

4.8 Determination of dissolution rate Proceed as specified in Appendix F.

4.9 Determination of water-insoluble matter Proceed as specified in Appendix G.

5. Test Report Test reports should include, but are not limited to, the following.

- a) Specify that the test was conducted according to this document;
- b) Necessary information about the test material (source, type, texture, color, properties, etc.);
- c) Name, model, manufacturer, and production date of the sample;
- d) Detailed information on sample preparation and conditioning, if applicable;