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

GB/T 15022.7-2017

**Resin based reactive compounds used for electrical insulation -
Part 7: Epoxy-anhydride vacuum pressure impregnation(VPI)
resin**

电气绝缘用树脂基活性复合物 第7部分：环氧酸酐真空压力浸渍(VPI)树脂

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Foreword

GB/T 15022 "electrical insulating resin-based active composite" is divided into the following sections.

- Part 1. Definition and general requirements;
 - Part 2. Test methods;
 - Part 3. No filler epoxy resin compound;
 - Part 4. Unsaturated polyester-based impregnating resin;
 - Part 5. Quartz filler epoxy resin composite;
 - Part 6. Nuclear Power Plant 1E level distribution transformer insulation with epoxy resin;
 - Part 7. Epoxy anhydride vacuum pressure impregnation (VPI) resin;
 - Part 8. Epoxy modified unsaturated polyester vacuum pressure impregnation (VPI) resin;
- This section GB/T 15022 Part 7. This section drafted in accordance with GB/T 1.1-2009 given rules. Please note that some of this document may be patentable. The issuing agencies of this document do not bear the responsibility of identifying these patents. This part is proposed by China Electrical Equipment Industry Association. This part of the National Standardization Technical Committee insulation materials (SAC/TC51) centralized. This section drafted unit. Suzhou Jiufeng Electric Insulation Systems Co., Ltd., Zhejiang Rongtai Technology Enterprises Ltd., Suzhou Taihu Lake Electric New Materials Co., Ltd., Guilin Electric Institute of Science and Technology Co., Ltd. The main drafters of this section. Xia Yu, Cui Cui, Luo Chuan Yong, Cao Wanrong, Zhang Chunqi, Li Xinzong, Tao Chunchu. Resins for electrical insulation Part 7. Epoxy anhydride vacuum pressure impregnation (VPI) Resin

1 Scope

GB/T 15022.7-2017 is the Chinese national standard on resin based reactive compounds used for electrical insulation - part 7: epoxy-anhydride vacuum pressure impregnation(vpi)

resin, in the field of electrical engineering. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 1 November 2017 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 May 2018. Classification: ICS 29.035.99, CCS K15. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

GB/T 15022 provisions of this part of the electrical insulation with epoxy acid anhydride vacuum pressure impregnation (VPI) resin classification, requirements, test side Law, inspection rules and packaging, marking, storage and transportation. This section applies to large and medium-sized high-voltage motors, wind turbines, hydroelectric generators and steam turbine insulation impregnated F-class, H-ring Oxide Anion Vacuum Pressure Impregnation (VPI) Resin.

Note. The resin is an epoxy anhydride (which may contain an epoxy reactive diluent) and a liquid acid anhydride composed of epoxy acid anhydride vacuum pressure impregnation (VPI) resin.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version applies to this article Pieces. For undated references, the latest edition (including all amendments) applies to this document. Paints for electrical insulation - Part 2. Test methods

GB/T 6488-2008 liquid chemical products - Determination of refractive index (20 °C)

GB/T 11026.1-2003 Thermal insulation of electrical insulating materials - Part 1. Assessment of aging procedures and test results

GB/T 11026.2-2012 Heat resistance of electrical insulating materials Part 2. Selection of test criteria

GB/T 11026.3-2006 Electrical insulating materials heat resistance - Part 3. Calculation of heat resistance characteristics of the parameters Thermal insulation of electrical insulating materials - Part 4. Aging ovens Single chamber ovens

GB/T 15022.2-2007 Resin-based reactive composites for electrical insulation - Part 2. Test methods

ISO 7327-1994 Determination of Free Acid in Curing Agents and Accelerators for Plastic Epoxy Resin (Plastics-Hardeners

and accelerators for epoxide resins-Determination of free acid in acid anhydride)

3 Categories

This section according to Table 1 to classify the product. Table 1 product classification Type
23 °C ± 1 °C viscosity range High viscosity Low viscosity 300 mPa · s to 500 mPa · s 100
mPa · s to 250 mPa · s

4 Requirements

Products should meet the requirements of Table 2 and Table 3, respectively.