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

GB/T 5757-2008

Determination of water content of ion exchange resins

离子交换树脂含水量测定方法

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Foreword

This standard replaces GB/T 5757-1986 "Determination of moisture content of the ion exchange resin." This standard compared with GB/T 5757-1986, were for text and other editorial changes. The standard proposed by China Petroleum and Chemical Industry Association. This standard by the National Standardization Technical Committee plastic universal methods and products Club (SAC/TC15/SC4) centralized. This standard is mainly drafted by: Xi'an Thermal Power Research Institute Co., Ltd. Zhejiang win glory Industrial Co., Ltd., Zibo East Chemical Co. Ltd., Jiangsu Su Qing water treatment project Corporation, the State Quality Inspection Center of synthetic resin. The main drafters of this standard. Wang Guangzhou-Zhuhai, Cuihuan Fang, Shen Jianhua, Hu Jinjiang, Di Jinghua, Qian Ping, Wang Jiandong. This standard replaces the standards previously issued as follows:

--- GB/T 5757-1986. Ion exchange resin moisture content determination

1 Scope

China's national method for determining the water content of ion exchange resins. Water is not an impurity in an ion exchange resin - it is part of what the resin is. The beads are a crosslinked polymer network swollen with water held inside the gel, and the amount held is a direct measure of the crosslinking: a lightly crosslinked resin swells more, exchanges ions faster and is mechanically weaker, while a heavily crosslinked one holds less water, is tougher and is slower. So the water content characterises the resin rather than merely describing its condition, and every other property reported on a resin is quoted on a basis that depends on it. The method is a straightforward drying determination, and the conditions are the substance of it: the resin must be dried far enough to remove the water and not so far that the polymer or its functional groups decompose. The standard specifies determination by continuous drying at 105 to 110 degrees C, for resins that undergo no chemical change under those conditions.

This standard specifies the method for the determination of water content of the ion

exchange resin. This standard applies to (105 ~ 110) °C under continuous drying without chemical change in the water content of the ion exchange resin was measured.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB/T 5475 sampling ion exchange resin Resin pretreatment method GB/T 5476 ion exchange

3 Method Summary

The equilibrium water absorption of ion exchange resin sample, after removal of the external water particles by centrifugation, weighed amount of sample, with bake Dry remove internal moisture, calculated by reducing the quality of the water content of the resin.

4.1 Glass centrifugation tube. Figure 1. Millimeters

1 glass centrifuge tube filter