

ICS 83.080.10

CCS G32



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

GB/T 16579-2013

Replacing GB/T 16579-1996

**D001 macroporous strongly acidic styrene type cation
exchange resins**

D001大孔强酸性苯乙烯系阳离子交换树脂

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Quarantine of the People's Republic of China;
Standardization Administration of China**

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Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules. This standard replaces GB/T 16579-1996 "D001 styrene macroporous strong acid cation exchange resin", and GB/T 16579- Compared to 1996, the main technical changes are as follows:

- Cancel all kinds of products, "superior products", "first-class products" and "quality products" classification.
- Increased D001TR classification and corresponding indicators, the "scope size" requirements "(0.710mm ~ 1.250mm) $\geq 95\%$ ", "size limit "requirements" ($< 0.710\text{mm}$) $\leq 1\%$ ".
- "Exchange capacity" indicator to " $\geq 4.35\text{mmol/g}$ ".
- "Volume exchange capacity" indicator to " $\geq 1.8\text{mmol/mL}$ ".
- "Moisture" indicator to "45.0% ~ 55.0%."
- "Wet apparent density" indicator to " $0.77\text{g/mL} \sim 0.85\text{g/mL}$ ".
- "Wet true density" indicator to " $1.24\text{g/mL} \sim 1.28\text{g/mL}$ ".
- D001 "effective particle size" indicator to " $\geq 0.40\text{mm}$ ", "uniformity coefficient" indicator to " ≤ 1.6 ".
- D001FC "effective particle size" indicator to " $\geq 0.50\text{mm}$ ".
- D001SC "effective particle size" indicator to " $\geq 0.63\text{mm}$ ".
- D001MB "effective particle size" indicator to " $0.55\text{mm} \sim 0.90\text{mm}$ ", "size range" indicator to " $(0.500\text{mm} \sim 1.250\text{mm}) \geq 95\%$ ".
- "Infiltration ball mill rate" indicator to " $\geq 90\%$ ". 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: Su Qing Water Treatment Engineering Group Corporation, Xi'an Thermal Power Research Institute Co., Ltd., Ningbo

win glory resin has Limited, East Zibo Chemical Co., Ltd., the National Quality Supervision and Inspection Center of synthetic resin. The main drafters of this standard. Jiang Huiping, Cuihuan Fang, Shen Jianhua, Zhang Peng Hua, Zhao Ping, Di Jinghua. This standard replaces the standards previously issued as follows:

--- GB/T 16579-1996. D001 macroporous strong acid styrene cation Exchange resin

1 Scope

GB/T 16579-2013 is the Chinese national standard on d001 macroporous strongly acidic styrene type cation exchange resins, in the field of rubber and plastic industries. 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 6 September 2013 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 31 January 2014. Classification: ICS 83.080.10, CCS G32. 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.

This standard specifies the D001 styrene macroporous strong acid cation exchange resin product classifications, requirements, test methods, inspection rules, Signs, packaging, transport and storage. This standard applies to strongly acidic styrene containing sodium D001 macroporous sulfonic acid groups of the cation exchange resin. The products are mainly used Water softening, water preparation, hydrometallurgy and so on.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

GB/T 1631 ion exchange resin naming system and basis for specifications

GB/T 5475 sampling ion exchange resin Resin pretreatment method

GB/T 5476 ion exchange Resin Determination for water

GB/T 5757 ion exchange Determination of the resin particle size, effective size and uniformity coefficient of GB/T 5758 ion exchange

GB/T 8144 Determination of cation exchange capacity of the resin exchange Determination of true density

GB/T 8330 wet ion exchange resin Resins in wet density determination method GB/T 8331 ion exchange

GB/T 12598 ion exchange resin infiltration ball mill rate, measured after grinding ball rate

3 Product Categories

D001 macroporous strongly acidic styrene type cation exchange resin according to GB/T 1631 establishment. MB represents Mixed bed; FC table Shows dedicated floating bed; SC represents bunk beds dedicated; TR represents three-bed special.

4 Requirements

4.1 Appearance Light tan or brown opaque spherical particles.

4.2 Finished form Sodium.

4.3 Technical Requirements It shall comply with the technical requirements of Table 1.