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ION EXCHANGE RESIN

full line
of ion exchange resins

Every single requirement drive the industrial growth on a broader path



Styrene Series Gel Strong Acid Cation Exchange Resin

| Sanford | Functional Groups | Ionic form | (mmol/ml) Vol exchange capacity | (0.315-1.25mm) Particle size | Moisture content | (g/ml) Bulk density | Reversible swelling | Temp limit | Applications |
|--------------------------|--------------------|-----------------|------------------------------------|---------------------------------|------------------|------------------------|---|------------------|--|
| CG104 | -SO ₃ H | Na ⁺ | ≥1.3 | ≥95% | 55.0-65.0 | 0.74-0.84 | Na ⁺ → H ⁺ 22-25 | H: 100 Na:120 | Used in extracting of antibiotics,pharmaceutical process,preparation of pure water or high purity water and so on. |
| CG107 | -SO ₃ H | Na ⁺ | ≥1.9 | ≥95% | 45.0~50.0 | 0.77~0.87 | Na→ H ≤10 | H:100 Na:120 | Used in hard water softening,pure water manufacturing, hydro-metallurgy, rare elements separation, aminophenol extracting it is widely used in water treatment, sugar manufacturing, pharmacy, monosodium glutamate, hydro-metallurgy industries, etc. |
| CG107-FG (Food Grade) | -SO ₃ H | Na ⁺ | ≥1.9 | ≥95% | 45.0~50.0 | 0.77~0.87 | Na→ H ≤10 | H:100 Na:120 | Food Grade,high safety and standard,for direct contact with drinking water,food processing,beverage ,biopharmacy ,etc,.Used in commercial and home softeners to reduce the hardness of water.e.g. Ca and Mg ,to produce softened water. |
| CG107-FC | -SO ₃ H | Na ⁺ | ≥1.9 | 0.45~1.25mm ≥95% | 45.0~50.0 | 0.77~0.87 | Na→ H ≤10 | H:100 Na:120 | Used in hard water softening,pure water manufacturing,water softening applications of Floating bed. |
| CG107-MB | -SO ₃ H | Na ⁺ | ≥1.9 | 0.50~1.25mm ≥95% | 45.0~50.0 | 0.77~0.87 | Na→ H ≤10 | H: 100 Na:120 | Used in hard water softening,pure water manufacturing, Mixed-bed water treatment system. |

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|--------------------------|--------------------|-----------------|-------|------|-----------|-----------|--------------|------------------|---|
| CG108 | -SO ₃ H | Na ⁺ | ≥2.0 | ≥95% | 42.0~48.0 | 0.78~0.88 | Na→ H 7-9 | H: 100 Na:120 | Hard water softening, pure water manufacturing, with good exchange capacity and physical stability. hydrometallurgy, rare element separation. |
| CG108-FG (Food Grade) | -SO ₃ H | Na ⁺ | ≥2.0 | ≥95% | 42.0~48.0 | 0.78~0.88 | Na→ H 7-9 | H: 100 Na:120 | Food Grade,high safety and standard,for direct contact with drinking water,food processing,beverage ,biopharmacy ,etc,.Used in commercial and home softeners to reduce the hardness of water.e.g. Ca and Mg ,to produce softened water. |
| CG110 | -SO ₃ H | Na ⁺ | ≥2.20 | ≥95% | 38.0~45.0 | 0.82~0.92 | Na→ H 3-5 | H: 100 Na:120 | Hard water softening, pure water manufacturing,Antibiotic extraction and drug purification, etc. |
| CG112 | -SO ₃ H | Na ⁺ | ≥2.30 | ≥95% | 34.0~42.0 | 0.82~0.92 | Na→ H 3-5 | H: 100 Na:120 | |
| CG114 | -SO ₃ H | Na ⁺ | ≥2.30 | ≥95% | 30.0~40.0 | 0.85~0.95 | Na→ H 2-4 | H: 100 Na:120 | Mainly used in the pharmaceutical industry, antibiotics extraction, antibiotics extraction, etc. |
| CG116 | -SO ₃ H | Na ⁺ | ≥2.40 | ≥95% | 30.0~40.0 | 0.85~0.95 | Na→ H 2-4 | H: 100 Na:120 | |
| SA-2 | -SO ₃ H | Na ⁺ | ≥2.00 | ≥95% | 42.0~48.0 | 0.80~0.88 | Na→ H 6-8 | H: 100 Na:120 | Mainly used in the extraction of various amino acids, including lysine, glutamic acid, glutamine, etc. |

Acrylic Acid Series Gel And Macroporous Weak Acid Cation Exchange Resin

| Sanford | Functional Groups | Ionic form | (mmol/ml) Vol exchange capacity | (0.315-1.25mm) Particle size range | Moisture content | (g/ml) Bulk density | Reversible swelling | Temp limit | Applications |
|---------|-------------------|------------|------------------------------------|---------------------------------------|------------------|------------------------|---------------------|------------|--|
| 110 | -COOH | Na / H | ≥4.0 (H) | ≥95% | 52~62 (H) | 0.68~0.82 (H) | H→Na 70-75 | 100 | Water treatment, electroplating and nickel wastewater treatment, pharmaceutical industry, etc. |

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|-------------|-------|----|----------|---------------------|-----------|---------------|------------|-----|--|
| JK110 | -COOH | Na | ≥4.0 (H) | ≥95% | 52~62 (H) | 0.75~0.85 (H) | H→Na ≤100 | 120 | Water treatment, electroplating and nickel wastewater treatment, pharmaceutical industry, especially suitable for floating window adsorption streptomycin and other water dealkali softening, desalination. |
| DK110 | -COOH | Na | ≥3.0 (H) | ≥95% | 52~62 (H) | 0.70~0.80 (H) | H→Na ≤75 | 100 | Heavy metal recovery, streptomycin, lysozyme extraction and purification, sugar |
| 122 (II) | -COOH | H | ≥1.0 (H) | ≥95% | 65~75 | 0.70~0.80 | H→Na 55.2 | 120 | It is mainly used in decolorization of streptomycin, colomycin, terramycin, acheomycin and other antibiotics. It is also used in decolorization and purification of amino acid, monosodium glutamate and sugar, reclamation of vitamin B12. |
| 724 | -COOH | H | ≥4.1 (H) | ≥90% | 45~55 | 0.70~0.78 | H-Na 70 | 120 | It is mainly used in separation and purification of biochemical products, such as chymotrypsin, Cytochrome C, Gentamicin, trypsin, lysozyme, streptomycin and other many biochemical pharmaceuticals. |
| D113 | -COOH | H | ≥4.4 (H) | ≥95% | 45~52 | 0.72~0.80 | H→Na ≤70 | 100 | Used in the deionization and softening of water and aqueous organic solutions, with 001x7 strongly acidic cation exchange resin can remove alkalinity and hardness from water obviously, especially removing |
| CM113-FC | -COOH | H | ≥4.4 (H) | 0.450~1.25m m | 45~52 | 0.72~0.80 | H→Na ≤70 | 100 | |
| CD-180 | -COOH | Na | ≥2.2 (H) | 0.16~0.42mm ≥95% | 60~70 | 0.75~0.85 | H→Na 75~80 | 100 | It is used in extraction of amikacin, sisomicin, tobramycin and other aminoglycosides antibiotics. |
| D151 (D152) | -COOH | Na | ≥2.0 (H) | ≥95% | 60~70 | 0.70~0.80 | H→Na 75~80 | 100 | Mainly used for the extraction of streptomycin, gentamicin, neomycin and other antibiotics, lysozyme extraction, industrial water softening, desalination, heavy metal wastewater treatment, separation and purification of biochemical products, sugar industry decolorization, ash |

Styrene Series Gel Strong Base Anion Exchange Resin

| Sanford | Functional Groups | Ionic form | (mmol/ml) Vol exchange capacity | (0.315-1.25mm) Particle size range | Moisture content | (g/ml) Bulk density | Reversible swelling | Temp limit | Applications |
|----------|---|------------|------------------------------------|---------------------------------------|------------------|------------------------|---------------------|------------------|---|
| AG102 | -N ⁺ (CH ₃) ₃ | Cl | ≥0.75 | ≥95% | 70~80 | 0.62~0.70 | CL→OH 30-35 | OH: 40 Cl:100 | It is mainly used in pure water and high purity water manufacturing, sugar solution decolorization, wastewater treatment, extraction of biochemical products and radioelements, etc. |
| AG104 | -N ⁺ (CH ₃) ₃ | Cl | ≥1.10 | ≥95% | 50~60 | 0.66~0.71 | CL→OH 25-30 | OH: 40 Cl:100 | |
| AG107 | -N ⁺ (CH ₃) ₃ | Cl | ≥1.35 | 0.315~1.25mm ≥95% | 42~48 | 0.67~0.73 | CL→OH 18-22 | OH: 40 Cl:100 | It is mainly used in preparation of pure water and high purity water, extraction and decolorization of biochemical products, wastewater treatment, separation of organic matter, extraction of radioactive elements and extraction of tungsten and molybdenum in hydrometallurgy. 201×7FC is the preferred type of floating bed device. |
| AG107-FC | -N ⁺ (CH ₃) ₃ | Cl | ≥1.35 | 0.45~1.25mm ≥95% | 42~48 | 0.67~0.73 | CL→OH 18-22 | OH: 40 Cl:100 | |
| AG107-MB | -N ⁺ (CH ₃) ₃ | Cl | ≥1.35 | 0.40~0.90mm ≥95% | 42~48 | 0.67~0.73 | CL→OH 18-22 | OH: 40 Cl:100 | |
| AG107-SC | -N ⁺ (CH ₃) ₃ | Cl | ≥1.3 | 0.63~1.25mm ≥95% | 42~48 | 0.66~0.68 | CL→OH ≤30 | OH: 40 Cl:100 | |
| 202×7 | -N ⁺ (CH ₃) ₃ | Cl | ≥1.3 | ≥95% | 40~48 | 0.64~0.74 | CL→OH 18-22 | OH: 40 Cl:100 | Pure water manufacturing, radioactive element extraction, etc. |
| AG108 | -N ⁺ (CH ₃) ₃ | Cl | ≥1.3 | ≥95% | 38~46 | 0.68~0.78 | CL→OH 16-20 | OH: 40 Cl:100 | High purity water manufacturing, radioactive elements extraction. |
| HZ202 | -N ⁺ (CH ₃) ₃ | Cl | ≥0.85 | ≥95% | 70~80 | 0.65~0.70 | CL→OH 30-35 | OH: 40 Cl:100 | It is mainly used in extraction and refining of biochemical and pharmaceutical industries, decolorization of extracts and fermentation liquid, adsorption extraction of natural vitamin E, and extraction of antibiotics. |
| 202 | N—(CH ₃) ₂ C ₂ H ₄ OH | Cl | ≥1.4 | ≥95% | 36~46 | 0.68 ~ 0.76 | CL→OH ≤15 | OH: 40 Cl:60 | Preparation of pure water, especially suitable for high salt content of water sources, separation of biochemical products. |

Styrene Series Macroporous Strong Base Anion Exchange Resin

| Sanford | Functional Groups | Ionic form | (mmol/ml) Vol exchange capacity | (0.315-1.25mm) Particle size range | Moisture content | (g/ml) Bulk density | Reversible swelling | Temp limit | Applications |
|----------|---|------------|------------------------------------|---------------------------------------|------------------|------------------------|---------------------|----------------|---|
| AM201 | -N ⁺ (CH ₃) ₃ | Cl | ≥1.2 | ≥95% | 50~60 | 0.65~0.73 | Cl→OH ≤20 | OH 40 Cl 80 | They are mainly used in manufacture and purification of pure water and high purity water, decolorization of sugar solution and fermentation solution, wastewater treatment, adsorption and extraction of vanadium pentoxide, recycling of heavy metal, etc. |
| AM201-FC | -N ⁺ (CH ₃) ₃ | Cl | ≥1.2 | 0.45~1.25mm ≥95% | 50~60 | 0.65~0.73 | Cl→OH ≤20 | OH 40 Cl 80 | |
| AM201-SC | -N ⁺ (CH ₃) ₃ | Cl | ≥1.1 | 0.63~1.25mm ≥95% | 50~60 | 0.65~0.73 | Cl→OH ≤20 | OH 40 Cl 80 | |

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|----------|--|----|-------------|----------------------------|-------|-----------|----------------------------------|-----------------|--|
| AM201-MB | $-N^+(CH_3)_3$ | Cl | ≥ 1.2 | 0.40~0.90mm $\geq 95\%$ | 50~60 | 0.65~0.73 | Cl \rightarrow OH ≤ 20 | OH 40 Cl 80 | D201FC is specially used for floating bed device; |
| AM202 | $-N^+(CH_3)_2$ C ₂ H ₄ OH | Cl | ≥ 1.2 | $\geq 95\%$ | 47~57 | 0.68~0.74 | Cl \rightarrow OH ≤ 20 | ≤ 40 | Pure water manufacturing, D202SC: pure water preparation in bunk bed system, D202FC: pure water preparation in floating bed system. |
| AM202-SC | $-N^+(CH_3)_2$ C ₂ H ₄ OH | Cl | ≥ 1.15 | 0.63~1.25mm $\geq 95\%$ | 47~57 | 0.68~0.74 | Cl \rightarrow OH ≤ 20 | OH 40 Cl 100 | |
| AM202-FC | $-N^+(CH_3)_2$ C ₂ H ₄ OH | Cl | ≥ 1.2 | 0.45~1.25mm $\geq 95\%$ | 47~57 | 0.68~0.74 | Cl \rightarrow OH ≤ 20 | OH 40 Cl 100 | |
| AM204 | $-N^+(CH_3)_3$ | Cl | ≥ 0.55 | $\geq 95\%$ | 70~85 | 0.60~0.70 | Cl \rightarrow OH ≤ 20 | OH 60 Cl 80 | Mainly used in pharmaceutical industry and intestinal mucosa extraction of heparin sodium, etc. |
| D290 | $-N^+(CH_3)_3$ | Cl | ≥ 0.8 | $\geq 95\%$ | 60~70 | 0.65~0.70 | Cl \rightarrow OH 15-18 | OH 40 Cl 100 | Drug extraction and separation, food, sugar industry, etc. |
| D296 | $-N^+(CH_3)_3$ | Cl | ≥ 1.1 | $\geq 95\%$ | 50~60 | 0.65~0.75 | Cl \rightarrow OH 18-20 | OH 40 Cl 100 | Water treatment, high-speed mixed bed water treatment, etc. |
| D280 | $-N^+C_5H_5C$ H ₆ | Cl | ≥ 0.8 | $\geq 95\%$ | 58~68 | 0.68~0.78 | Cl \rightarrow OH 15-18 | OH 50 Cl 100 | Organic refining, sugar desalination, etc. |
| D262 | $-N^+(CH_3)_3$ | Cl | ≥ 0.8 | $\geq 95\%$ | 45~55 | 0.68~0.78 | Cl \rightarrow OH 8-10 | OH 40 Cl 100 | Remove waste organic matter in low concentration in water supply. |
| D284 | $-N^+(CH_3)_2$ C ₂ H ₄ OH | Cl | ≥ 1.33 | $\geq 95\%$ | 45~55 | 0.66~0.71 | Cl \rightarrow OH 8-10 | OH 50 Cl 100 | Pure water manufacturing. |
| AM201-GF | $-N^+(CH_3)_3$ | Cl | ≥ 0.8 | $\geq 95\%$ | 60~70 | 0.66~0.70 | Cl \rightarrow OH 12-18 | OH 40 Cl 100 | Used for assimilation of glucose isomerase. |

Styrene Series Macroporous Weak Base Anion Exchange Resin

| Sanford | Functional Groups | Ionic form | exchange capacity (mmol/ml) | Particle size range % | Moisture content % | (g/ml) Bulk density | Reversible swelling % | Temp limit °C | Applications |
|----------------|-----------------------------------|------------|-----------------------------|-------------------------------|--------------------|---------------------|----------------------------------|-------------------------------|--|
| D301 | -N(CH ₃) ₂ | free amine | ≥ 1.45 | 0.315-1.25mm | 48~58 | 0.65~0.72 | OH \rightarrow Cl ≤ 28 | OH ≤ 100 Cl ≤ 40 | It is mainly used in purification, ash removal and decolorization of sugar solution, decolorization of xylose, desalination and decolorization of starch sugar and water |
| D301-SC | -N(CH ₃) ₂ | free amine | ≥ 1.45 | 0.315~0.630 mm $\geq 95\%$ | 48~58 | 0.65~0.72 | OH \rightarrow Cl ≤ 28 | OH ≤ 100 Cl ≤ 40 | |

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|----------------|-----------------------------------|-----------------|-------|--------------------------|-------|-----------|--------------|-------------------|---|
| D301-FC | -N(CH ₃) ₂ | free amine | ≥1.45 | 0.450~1.25m m ≥95% | 48~58 | 0.65~0.72 | OH→Cl ≤30 | OH ≤100 Cl ≤40 | treatment industry. When being used in industrial water treatment, it can be used for manufacturing the pure water and high purity water, electroplating the chromium from wastewater, etc.D301-sc and d301-fc were used to prepare pure water and high pure water in the layer bed and floating bed respectively.1-9 |
| D301G | -N(CH ₃) ₂ | OH ⁻ | ≥1.3 | 0.60~1.50mm ≥95 | 50~60 | 0.65~0.72 | OH→Cl ≤28 | OH ≤100 Cl ≤40 | It is mainly used in hydrometallurgy, extracting the gold from the ore slurry and manufacturing pure water and high purity water. |

Acrylic Acid Series Gel And Macroporous Weak Base Anion Exchange Resin

| Sanford | Functional Groups | Ionic form | Volume exchange capacity (mmol/ml) | (0.315-1.25mm) Particle size range % | Moisture content % | Bulk density (g/ml) | Reversible swelling % | Temp limit °C | Applications |
|----------------|----------------------------------|------------|------------------------------------|--------------------------------------|--------------------|---------------------|-----------------------|-------------------|---|
| 312 | -N(R ₂) ₂ | | ≥1.6 | ≥95 | 56~63 | 0.66~0.74 | OH→Cl ≤28 | OH ≤100 Cl ≤40 | High organic matter, high salt content of water in the preparation of pure water, biochemical pharmaceutical. |
| D311 | -NH ₂ | | ≥2.2 | ≥95 | 55~65 | 0.70~0.80 | OH→Cl ≤25 | OH ≤100 Cl ≤40 | It is mainly used for drug extraction, acid removal and decolorization of sugar solution, water treatment and citric acid extraction. |

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|-------------|-----------------------------------|--------------|--|-----|-------|-----------|----------------|-------------------|--|
| D315 | -NH ₂ | Free Base | ≥2.0 | ≥95 | 52~62 | 0.70~0.80 | OH→Cl ≤25 | OH ≤100 Cl ≤40 | Mainly used in drug extraction, Biological fermentation liquid decolorization, sugar liquid decolorization, Citric acid, lactic acid refining, water treatment applications. |
| D370 | -N(CH ₃) ₂ | | ≥1.2 | ≥95 | 50~60 | 0.66~0.71 | OH→Cl 15-20 | OH ≤100 Cl ≤40 | Water treatment, electroplating containing chromium wastewater treatment, good pollution resistance. |
| D371 | -N(CH ₃) ₂ | | ≥1.4 | ≥95 | 50~60 | 0.65~0.75 | OH→Cl 8-13 | OH ≤100 Cl ≤40 | |
| D390 | -NH ₂ | | ≥1.2 | ≥95 | 60~65 | 0.70~0.75 | OH→Cl 20-25 | OH ≤100 Cl ≤40 | Pharmaceutical industry, antibiotic extraction and decolorization. |
| D396 | -NH ₂ | | ≥1.2 | ≥95 | 60~70 | 0.70~0.80 | OH→Cl 20-25 | OH ≤100 Cl ≤40 | |
| D392 | -NH ₂ | | ≥1.4 | ≥95 | 53~58 | 0.67~0.73 | OH→Cl 20-25 | OH ≤100 Cl ≤40 | |
| D380 | -NH ₂ | | Streptomycin adsorption ≥200,000 units/ml | ≥95 | 70~73 | 0.65~0.70 | OH→Cl 40-60 | OH ≤100 Cl ≤40 | Streptomycin extraction, citric acid and other organic acid decolorization. |
| D382 | -NHCH ₃ | | ≥1.2 | ≥95 | 40~50 | 0.66~0.70 | OH→Cl 17-19 | OH ≤100 Cl ≤40 | Weak acid refining, strong separation of weak acid. |
| D941 | -NH ₂ | | ≥2.0 | ≥95 | 55~65 | 0.70~0.80 | OH→Cl ≤25 | OH ≤100 Cl ≤40 | It is mainly used for decolorization and purification of sugar and other food industry, stevia, ginseng saponin, panax notoginseng saponin, antibiotics and other natural medicines. |

Epoxy Series And Phenolic Aldehyde Series Ion Exchange Resin

| Sanford | Functional Group | Ionic form | (mmol/ml) Volume exchange capacity | (10-50mesh) Particle size range | Moisture content | (g/ml) Bulk density | Reversible swelling | Temp limit | Applications |
|------------------|------------------|------------|---------------------------------------|------------------------------------|------------------|------------------------|---------------------|---------------------|--|
| 330 (701) | NH ₂ | Free Base | / | 10-50mesh ≥90% | 60~70 | 0.70~0.80 | OH→Cl ≤30 | OH ≤ 100 Cl ≤ 40 | Mainly used to remove Cl ⁻ and SO ₂ - plasma in water treatment.Purification of citric acid, streptomycin, malic acid and amino acidRemove inorganic acids, extract organic acids and decolorize,Extract copper and silver ions. |
| 122 (II) | -COOH | H | ≥0.9 | 10-50mesh ≥90% | 60~80 | 0.70~0.80 | H→Na ≤55 | 120 | Mainly used to remove Cl ⁻ and so ₂ -plasma in water treatment.Purification of citric acid, streptomycin, malic acid and amino acidRemove inorganic acids, extract organic acids and decolorize, Extract copper and silver ions. |

Macroporous Adsorption Resin

| Sanford | (m ² /g) Relative surface area | (nm) average pore size | (0.315-1.25mm) Particle size range | Moisture content | (g/ml) Bulk density | Temp limit | Molecular polarity | Applications |
|-------------------------|--|---------------------------|---------------------------------------|------------------|------------------------|------------|--------------------|---|
| YPR-II (DA100×3) | 520~570 | 9~10 | ≥95 | 45~55 | 0.67~0.73 | 120 | | It is used for the adsorption of abamecia, ivermezia, erythromycin and its series of products, extraction and separation of ginkgo, antibiotics, Chinese herbal medicine, plasma separation and purification, preparation of stationary phase for the enrichment of trace elements, organic wastewater treatment and so on. |

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| D1300 | 460~500 | 9~10 | ≥95 | ≤70 | 0.65~0.75 | 120 |
| D1400 | 460~500 | 9~10 | ≥95 | ≤70 | 0.65~0.75 | 120 |
| D101 | 550~650 | 9~10 | ≥95 | 65~75 | 0.65~0.75 | 120 |
| D101-1 | 600~700 | 9~10 | ≥95 | 65~75 | 0.65~0.75 | 120 |
| X-5 | 500~600 | 28~30 | ≥95 | 53~63 | 0.61~0.71 | 120 |
| D3520 | 480~520 | 8~9 | ≥95 | 70~80 | 0.60~0.70 | 120 |
| NKA | 550~600 | 20~22 | ≥95 | 62~72 | 0.61~0.71 | 120 |

Non-polar

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| Anti-cardiovascular and cerebrovascular, anti-tumor drugs and a variety of Chinese herbal medicine extraction and decolorization, the extraction of natural products. Treating non-polar organic compounds in industrial wastewater, such as papermaking wastewater and pesticide wastewater. |
| Adsorption and extraction of vitamin B12 and many other antibiotics. Extraction of natural products and treatment of non-polar organic compounds in industrial wastewater, such as papermaking wastewater and pesticide wastewater. |
| Extraction and refinement of natural drugs such as ginsenosides, panax notoginseng saponins, double twist, ginkgo flavones, tea polyphenols, soybean isoflavones, puerarin, glycyrrhizin and chlorophyll. |
| It is mainly used in the extraction and refinement of natural drugs such as ginsenosides, notoginseng saponins, yam saponins, dioscorea, ginkgo flavone, tea polyphenols, soybean isoflavones, puerarin, glycyrrhizin and chlorophyll. |
| Mainly used for antibiotics, pigment extraction, Chinese herbal medicine separation and extraction, organic wastewater, uremia patients blood removal of molecular substances, etc. |
| Protein extraction, decolorization, desalination, etc. |
| Mainly used for saponin extraction and so on. |

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|---------------|----------|-------|-----|-------|-----------|-----|---------------|--|
| H103 | 900~1100 | 8~10 | ≥95 | 45~55 | 0.70~0.75 | 120 | | Mainly used for the extraction and separation of antibiotics, organic wastewater, removal of phenols, oxides, pesticides and so on. Adsorption and recovery of organic compounds containing benzene, chlorobenzene, phenol, aniline, salicylic acid, |
| AB-8 | 480~520 | 13~14 | ≥95 | 60~70 | 0.62~0.72 | 120 | Weak polarity | It is most suitable for the extraction, separation and purification of water-soluble and weakly polar substances, such as ginkgo flavone adsorption extraction, natural pigment extraction, stevia sugar extraction, alkaloid extraction, etc. It has good adsorption effect on cephalosporin, ivermectin |
| CAD-40 | 460~500 | 7~8 | ≥95 | 60~70 | 0.67~0.73 | 120 | | Used for the adsorption and extraction of vitamin B12 and other antibiotics. |
| SAD-1 | 650~750 | 10~12 | ≥95 | 60~70 | 0.63~0.73 | 120 | | Juice decolorization, bitterness removal, etc. |
| DM130 | 500~550 | 9~10 | ≥95 | 65~75 | 0.67~0.73 | 120 | | It is mainly used to extract and refine ginkgo flavone, ginsenosides, panax notoginseng saponins, soybean isoflavones, tea polyphenols and other natural medicines. |
| DM301 | 330~380 | 13~17 | ≥95 | 65~75 | 0.62~0.72 | 120 | | It is suitable for organic compounds with weak polarity and |
| ADS-17 | 90~150 | 25~30 | ≥95 | 52~62 | 0.65~0.75 | 120 | Mid-polar | Ginkgo flavone adsorption extraction, seabuckthorn leaf flavone adsorption extraction, camptothecin extraction and separation. |
| NKA-II | 160~200 | 14~16 | ≥95 | 42~52 | 0.65~0.75 | 120 | | Removal of phenols and organic compounds. |
| NKA-9 | 250~290 | 13~17 | ≥95 | 65~75 | 0.65~0.72 | 120 | | For bilirubin removal, alkaloid separation, flavonoids extraction, etc. |

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|---------------|---------|-------|-----|-------|-----------|-----|----------|--|
| S-8 | 100~120 | 28~30 | ≥95 | 66~72 | 0.60~0.70 | 120 | polarity | Used for antibiotics, Chinese herbal medicine extraction and separation, plasma separation and purification, preparation of stationary phase for enrichment of trace elements, organic wastewater treatment, etc. |
| DA201 | 150~200 | 23~25 | ≥95 | 65~75 | 0.62~0.72 | 120 | | The extraction of fritillary fritillary and compound medicine, as well as the treatment of waste water and liquid in chemical and pharmaceutical industry, the recovery and purification of chemical products have good effects. |
| SXD-11 | 800~900 | 12~14 | ≥95 | 60~70 | 0.62~0.72 | 120 | | It is mainly used for the extraction and separation of antibiotics, Chinese herbs and pigments, and the preparation of fixed phase for the enrichment of trace elements. |

Mixed Bed Resin

| Sanford | (mmol/ml) Vol exchange capacity | Moisture % | (g/ml) Bulk density | Particle Size ≥95% | Functional Groups | Ionic form | Vol Ratio (H+/OH-) | (g/ml) Bulk density | Applications |
|----------------------|------------------------------------|------------|------------------------|--------------------|---------------------------------------|-------------------------------|--------------------|------------------------|--|
| MB100 (> 10.0 MΩ) | OH :≥1.0 H:≥1.7 | 55-65 | 0.72-0.74 | 0.4-1.25mm | -SO ₃ -NCH ₃ | 99% H ⁺ 90% OH- | 50/50 | 0.72-0.74 | Suitable for use in the RO, EDI pre-processing equipment for the ultra-pure water purification system as a terminal Preparation of ultra-pure water mixed bed. |
| MB101 (> 16.5MΩ) | OH:≥1.1 H:≥1.8 | 55-65 | 0.71-0.73 | 0.4-1.25mm | -SO ₃ -NCH ₃ | 99% H ⁺ 90% OH- | 40/60 | 0.71-0.73 | Suitable for use in the RO, EDI pre-processing equipment for the ultra-pure water purification system as a terminal Preparation of ultra-pure water mixed bed. |
| | OH:≥1.1 | | | | -SO ₃ | 99% H ⁺ | | | a high quality resin mixture for direct |

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|----------------------|-------------------|-------|-----------|------------|---------------------------------------|-------------------------------|--|-----------|---|
| MB102 (> 17.5 MΩ) | H:≥1.9 | 55-65 | 0.71-0.73 | 0.4-1.25mm | -NCH ₃ | 95% OH- | 30/70 | 0.71-0.73 | purification of water. It is suitable for use in regenerable or non-regenerable cartridges and in large ion exchange units. |
| MB103 (> 18.0 MΩ) | OH:≥1.1 H:≥1.9 | 55-65 | 0.71-0.73 | 0.4-1.25mm | -SO ₃ -NCH ₃ | 99% H ⁺ 95% OH- | 1: 1 (eql ratio) | 0.71-0.73 | pure water production(Ready to use Mixed Bed) MB103 is read to use mixed bed resins with selected uniform particle size SAC and SBARESINS with high quality after exactly conversion and purification. The |
| MB104 (> 18.0 MΩ) | OH:≥1.1 H:≥1.9 | 55-65 | 0.72-0.74 | 0.4-1.25mm | -SO ₃ -NCH ₃ | 99% H ⁺ 95% OH- | Inner Cooling Water Treatment, MB104 resin is appropriate for alkalescency ion exchange treatment and dedicated for thermal power plant inner cooling watertreatment The chemical desalted water isconsidered as replenishment for inner cooling water and is used when PH value is relatively low. MB104 resin is appropriate for the method of single or double small mixed bed treatment and used when electrical conductivityfor inner cooling water is relatively high. | | |

Chelating Resin

| Sanford | (mmol/ml) Vol exchange capacity | Moisture % | (g/ml) Bulk density | (g/ml) Specific density | Particle Size ≥95% | Ionic form | Functional Groups | Applications |
|---------|--|---------------|------------------------|-------------------------------|--------------------------|-----------------|---|---|
| D401 | ≥0.8 | 55-65 | 0.71-0.75 | 1.15-1.25 | 0.425- 1.20mm | Na ⁺ | -C ₄ H ₇ NO ₄ | Used mainly to separate and recover the precious metals ion, especially for the secondary refining of salt brine when the content of Strontium is near or higher than the content of calcium in the process of ion membrane alkaline producing. |
| D402 | ≥0.9 | 55-65 | 0.71-0.75 | 1.15-1.25 | 0.425- 1.20mm | Na ⁺ | -C ₄ H ₁₂ NO ₃ P | |

| | | | | | | | | |
|-------------|-------|-------|-----------|-----------|--------------|-----------------|---|---|
| D403 | ≥0.9 | 50-60 | 0.71-0.75 | 1.08-1.18 | 0.425-1.20mm | Free Base | -C ₇ H ₁₇ NO ₅ | Mainly used for high selective and high capacity for boron adsorption from underground and potable water. |
| D405 | ≥0.9 | 45-50 | 0.71-0.75 | 1.02-1.08 | 0.425-1.20mm | H ⁺ | -CH ₄ N ₂ S | It is mainly used for high selective and high capacity for various mercury (Hg) removal from industrial effluent. |
| D406 | ≥0.5 | 50-55 | 0.71-0.75 | 1.15-1.25 | 0.3-1.20mm | Al | | Used for fluorine selection. |
| D407 | ≥0.9 | 50-56 | 0.67-0.70 | 1.05-1.10 | 0.3-1.20mm | Cl ⁻ | -N ⁺ (CH ₃) ₃ /-SO ₃ | Used for nitrate removal from fresh water. |
| D408 | ≥0.6 | 55-65 | 0.67-0.70 | 1.05-1.15 | 0.3-1.20mm | OH ⁻ | FeO(OH) | For arsenic selection. Mainly used in drinking water treatment. |
| D410 | ≥0.75 | 40-50 | 0.67-0.70 | 1.05-1.15 | 0.3-1.20mm | Cl ⁻ | -N ⁺ (CH ₃) ₃ /-SO ₃ | For the removal of Iron(Fe). |

