
Anhui
Sanxing Resin
Product
Brochure

Content

SANXING RESIN PROFILE

Anhui Sanxing Resin Technology Co.,Ltd. the association of Chinese ion exchange resin, is the main research and production base of ion exchange resin and macropore resin of China with annual capacity of 50.000 tons, accredited as a high and new technology enterprise by the Chinese government. It is located in the Guzhen development zone, covering an area of 153,200 Square meters(15.32 hectares). Besides, its total assets has reached RMB 800 million ($113MM), established in 2004.

Sanxing has been working on the research, development and manufacture of resin for several years, which is the key resin enterprises of China with independent technology research and development center. There are 180 staffs, 20 of them have Intermediate or higher professional titles. With experienced technicians, Sanxing has set up bio-separation lab with some universities of China, with strong technical capabilities.

There are advanced production method, good management system, high automatic level and complete QA system insides Sanxing. As a ISO9001 certified company, Sanxing can meet the China standard and international inspection standard. Sanxing can offer 100 kinds of products now, including Strong acid resin, Strong alkali resin, Weak acid resin, Weak alkali resin, macropore adsorption resin. These products can be used in power, chemical industry, pharmaceutical industry, food industry, biochemical industry, waste treatment and household water purification. Those productions have been sold into EU and Southeast Asia. We have aquared the certificate of WQA、NSF and water-related products have obtained sanitation license.

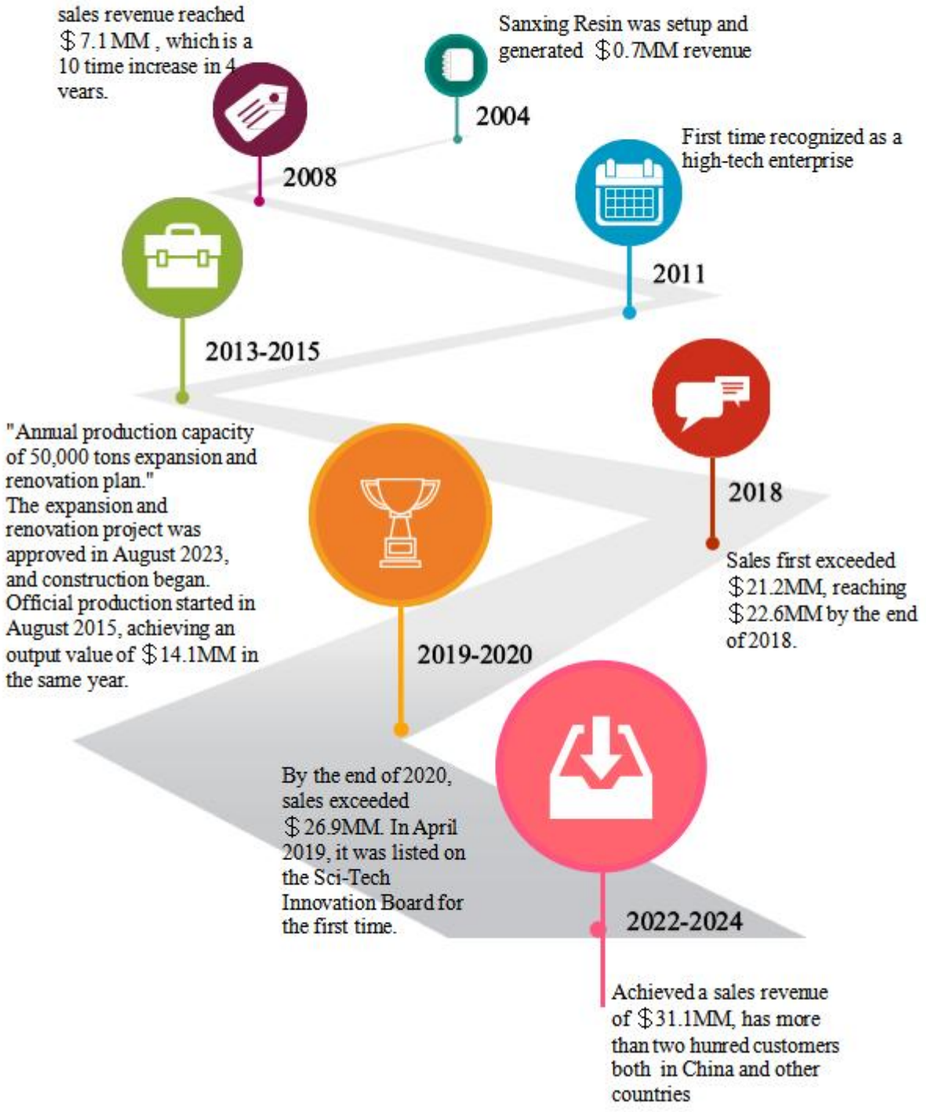
Sanxing enjoys beautiful and net working surrounding, which can meet the standard of ISO14001 environmental system. There is 24hour technical support hotline ready for providing excellent service for you.This will greatly help customers resolve any issues that arise online at any time. We have mature solutions for industries such as power plants, palm oil, semiconductors, chemicals, food, and pharmaceuticals. We help customers reduce procurement costs, extend service life, and overall, help customers lower their total cost of ownership.

Business philosophy: Honesty, Innovation, Excellence, Gratitude

Quality policy: Quality first, Customer first

Corporate vision: Rely on innovation drive, Establish industry benchmark. Regarding the adhering to the people-oriented, caring staff and other social responsibilities as their duty to achieve sustainable and harmonious development, Join hands with friends to contribute to the cause of human water health!

Sanxing Resin Growth History



Certificate of Company

NSF

WQA

ISO9001

HALAL


Drinking Water Sanitation License Approval

City-Recognized Enterprise Technology Center

Anhui Provincial Specialized, Sophisticated, Unique and New Small and Medium-sized Enterprise

Director Unit of the Ion Exchange Resin Association


Certificate of the National Torch Program Industrialization Demonstration Project

Honesty Enterprise Honor Certificate

High-tech Enterprise Certificat

Intellectual Property Certification Certificate

PRODUCT CATEGORY

Styrene Series Gel Strong Acid Cation Exchange Resin

Styrene Series Gel Strong Acid Cation Exchange Resin													
Sanxing	Functional Groups	Ionic form	Mass exchange capacity (mmol/g)	Volume exchange capacity (mmol/ml)	(0.315-1.25mm) Particle size range%	Moisture content%	Bulk density (g/ml)	Sphericity after attrition%	Reversible swelling%	Temperature limit (℃)	PH range	Appearance	Applications
001X4	$-SO_3^-$	Na^+	≥4.5	≥1.3	≥95	55.0-65.0	0.74-0.84	≥90	Na→H 22-25	H 100 Na 120	1-14	Brown yellow to brown grey color beads	Used in extracting of antibiotics, pharmaceutical process, preparation of pure water or high purity water and so on.
001X7	$-SO_3^-$	Na^+	≥4.5	≥1.9	≥95	45.0-50.0	0.77-0.87	≥90	Na→H ≤10	H 100 Na 120	1-14		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, hydrometallurgy industries, etc.
001X7FC	$-SO_3^-$	Na^+	≥4.5	≥1.9	0.45-1.25mm ≥95	45.0-50.0	0.77-0.87	≥90	Na→H ≤10	H 100 Na 120	1-14		Used in hard water softening,pure water manufacturing, water softening applications of Floating bed.
001X7MB	$-SO_3^-$	Na^+	≥4.5	≥1.9	0.50-1.25mm ≥95	45.0-50.0	0.77-0.87	≥90	Na→H ≤10	H 100 Na 120	1-14		Used in hard water softening,pure water manufacturing, Mixed-bed water treatment system.
001X8	$-SO_3^-$	Na^+	≥4.5	≥2.0	≥95	42.0-48.0	0.78-0.88	≥95	Na→H 7-9	H 100 Na 120	1-14		Hard water softening, pure water manufacturing, with good exchange capacity and physical stability, hydrometallurgy, rare element separation.
001X10	$-SO_3^-$	Na^+	≥4.3	≥2.2	≥95	38.0-45.0	0.82-0.92	≥90	Na→H 3-5	H 100 Na 120	1-14		Hard water softening, pure water manufacturing, Antibiotic extraction and drug purification? etc.
001X12	$-SO_3^-$	Na^+	≥4.2	≥2.3	≥95	34.0-42.0	0.82-0.92	≥90	Na→H 3-5	H 100 Na 120	1-14		
001X14	$-SO_3^-$	Na^+	≥4.0	≥2.3	≥95	30.0-40.0	0.85-0.95	≥90	Na→H 3-5	H 100 Na 120	1-14		Mainly used in the pharmaceutical industry, antibiotics extraction, antibiotics extraction, etc.
001X16	$-SO_3^-$	Na^+	≥3.8	≥2.4	≥95	30.0-40.0	0.85-0.95	≥90	Na→H 2-4	H 100 Na 120	1-14		
SA-2	$-SO_3^-$	Na^+	≥4.5	≥2.0	≥95	42.0-48.0	0.80-0.88	≥90	Na→H 6-8	H 100 Na 120	1-14		Mainly used in the extraction of various amino acids, including lysine, glutamic acid, glutamine, etc.

Styrene Series Macroporous Strong Acid Cation Exchange Resin

Styrene Series Macroporous Strong Acid Cation Exchange Resin												
Sanxing	Functional Groups	Ionic form	Mass exchange capacity (mmol/g)	Volume exchange capacity (mmol/ml)	(0.315-1.25mm) Particle size range%	Moisture content%	Bulk density (g/ml)	Sphericity after attrition%	Reversible swelling%	Temperature limit (℃)	PH range	Appearance	Applications
D001	$-SO_3^-$	Na^+	≥4.35	≥1.80	≥95	45.0-55.0	0.77-0.85	≥90	Na→H 9-10	H 100 Na 120	1-14	Brown opaque spherical grain	Manly used to produce pure water and ultra pure water and purify condensate water, as well as treat waste water and recover precious metal.
D001FC	$-SO_3^-$	Na^+	≥4.35	≥1.80	0.45-1.25mm ≥95	45.0-55.0	0.77-0.87	≥90	Na→H 9-10	H 100 Na 120	1-14		Pure water manufacturing for floating and bunk bed systems.
D001SC	$-SO_3^-$	Na^+	≥4.35	≥1.80	0.63-1.25mm ≥95	45.0-55.0	0.77-0.85	≥90	Na→H 9-10	H 100 Na 120	1-14		Pure water manufacturing and condensate treatment.
D001MB	$-SO_3^-$	Na^+	≥4.35	≥1.80	0.50-1.25mm ≥95	45.0-55.0	0.77-0.85	≥90	Na→H 9-10	H 100 Na 120	1-14		Pure water and condensate treatment in mixed bed system.
D072	$-SO_3^-$	Na^+	≥4.4	≥1.40	≥95	45.0-55.0	0.76-0.86	≥90	Na→H 9-10	H 100 Na 120	1-14		Organic reaction catalysis, high speed mixed bed water treatment, etc.
D061	$-SO_3^-$	Na^+	≥4.3	≥1.40	≥95	44.0-54.0	0.75-0.85	≥90	Na→H 6-8	H 100 Na 120	1-14		Food industry, amino acid extraction, organic reaction catalysis, water treatment, etc.
SXC-9	$-SO_3^-$	Na^+	≥4.7	≥1.50	04-1.25mm ≥95	≤10	0.65-0.75	≥90	Na→H 8-10	H 100 Na 120	1-14		Organic reaction catalysis.
D001-CC	$-SO_3^-$	Na^+	≥4.2	≥2.0	≥95	35.0-45.0	0.77-0.87	≥90	Na→H 2-4	H 100 Na 120	1-14	Brownish yellow to tan globular granules	Sugar industry special, sugar juice calcium removal, small expansion rate.

Styrene Series Gel Strong Base Anion Exchange Resin

Styrene Series Gel Strong Base Anion Exchange Resin												
Sanxing	Functional Groups	Ionic form	Mass exchange capacity (mmol/g)	Volume exchange capacity (mmol/ml)	(0.315-1.25mm) Particle size range%	Moisture content%	Bulk density (g/ml)	Sphericity after attrition%	Reversible swelling%	Temperature Limit (℃)	PH range	Appearance	Applications
201X2	$-N^+(CH_3)_3$	Cl^-	≥4.0	≥0.75	≥95	70-80	0.62-0.70	/	Cl→OH 30-35	OH 40 Cl 100	1-14	Colorless to yellowish globular granules	It is mainly used in pure water and high purity water manufacturing, sugar solution decolorization, wastewater treatment, extraction of biochemical products and radio elements,etc.
201X4	$-N^+(CH_3)_3$	Cl^-	≥3.7	≥1.10	≥95	50-60	0.66-0.71	≥90	Cl→OH 25-30	OH 40 Cl 100	1-14		
201X7	$-N^+(CH_3)_3$	Cl^-	≥3.5	≥1.35	0.315-1.25mm ≥95	42-48	0.67-0.73	≥90	Cl→OH 18-22	OH 40 Cl 100	1-14		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. 201X7FC is the preferred type of floating bed device. 201X7MB is the preferred type of mixed bed device. 201X7SC is the preferred type of bunk bed device.
201X7FC	$-N^+(CH_3)_3$	Cl^-	≥3.5	≥1.35	0.45-1.25mm ≥95	42-48	0.67-0.73	≥90	Cl→OH 18-22	OH 40 Cl 100	1-14		
201X7MB	$-N^+(CH_3)_3$	Cl^-	≥3.5	≥1.35	0.40-0.90mm ≥95	42-48	0.67-0.73	≥90	Cl→OH 18-22	OH 40 Cl 100	1-14		
201X7SC	$-N^+(CH_3)_3$	Cl^-	≥3.5	≥1.3	0.63-1.25mm ≥95	42-48	0.66-0.68	≥90	Cl→OH ≤30	Cl 60	1-14		
201X8	$-N^+(CH_3)_3$	Cl^-	≥3.4	≥1.3	≥95	38-46	0.68-0.78	≥90	Cl→OH 16-20	OH 40 Cl 100	1-14		High purity water manufacturing, radioactive elements extraction.
202	$-N^+(CH_3)_2C_2H_4OH$	Cl^-	≥3.5	≥1.4	≥95	36-46	0.68-0.76	≥90	Cl→OH ≤15	OH 40 Cl 60	1-14		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

Styrene Series Macroporous Strong Base Anion Exchange Resin												
Sanxing	Functional Groups	Ionic form	Mass exchange capacity (mmol/g)	Volume exchange capacity (mmol/ml)	(0.315-1.25mm) Particle size range%	Moisture content%	Bulk density (g/ml)	Sphericity after attrition%	Reversible swelling%	Temperature limit (℃)	PH range	Appearance	Applications
D201	$-N^+(CH_3)_3$	Cl^-	≥3.7	≥1.2	≥95	50-60	0.65-0.73	≥90	Cl→OH ≤20	OH 40 Cl 80	1-14	Milky white to light yellow opaque globular granules	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. D201FC is specially used for Hoating bed device; D201MB is dedicated for mixing bed devices.
D201FC	$-N^+(CH_3)_3$	Cl^-	≥3.7	≥1.2	0.45-1.25mm ≥95	50-60	0.65-0.73	≥90	Cl→OH ≤20	OH 40 Cl 80	1-14		
D201SC	$-N^+(CH_3)_3$	Cl^-	≥3.7	≥1.1	0.63-1.25mm ≥95	50-60	0.65-0.73	≥90	Cl→OH ≤20	OH 40 Cl 80	1-14		
D201MB	$-N^+(CH_3)_3$	Cl^-	≥3.7	≥1.2	0.40-0.90mm ≥95	50-60	0.65-0.73	≥90	Cl→OH ≤20	OH 40 Cl 80	1-14		
D202	$-N^+(CH_3)_2C_2H_4OH$	Cl^-	≥3.6	≥1.2	≥95	47-57	0.68-0.74	≥90	Cl→OH ≤20	OH 40 Cl 80	1-14	Milky white opaque globular granules	Pure water manufacturing, D202SC: pure water preparation in bunk bed system, D202FC: pure water preparation in floating bed system.
D202SC	$-N^+(CH_3)_2C_2H_4OH$	Cl^-	≥3.4	≥1.15	0.63-1.25mm ≥95	47-57	0.68-0.74	≥90	Cl→OH ≤20	OH 40 Cl 80	1-14		
D202FC	$-N^+(CH_3)_2C_2H_4OH$	Cl^-	≥3.5	≥1.2	0.45-1.25mm ≥95	47-57	0.68-0.74	≥90	Cl→OH ≤20	OH 60 Cl 80	1-14		
D204	$-N^+(CH_3)_3$	Cl^-	≥3.5	≥0.55	≥95	70-85	0.60-0.70	≥90	Cl→OH ≤20	OH 60 Cl 80	1-14		Mainly used in pharmaceutical industry and intestinal mucosa extraction of heparin sodium,etc.
D290	$-N^+(CH_3)_3$	Cl^-	≥3.4	≥0.8	≥95	60-70	0.60-0.70	≥90	Cl→OH 15-18	OH 40 Cl 100	1-14		Drug extraction and separation, food, sugar industry, etc.
D296	$-N^+(CH_3)_3$	Cl^-	≥3.6	≥1.1	≥95	50-60	0.65-0.75	≥90	Cl→OH 18-20	OH 40 Cl 100	1-14	Pale yellow opaque globular particles	Water treatment, high-speed mixed bed water treatment, etc.
D280	$-N^+C_5H_5CH_3$	Cl^-	≥3.4	≥0.8	≥95	58-68	0.68-0.78	≥90	Cl→OH 15-18	OH 50 Cl 100	1-14		Organic refining, sugar desalination, etc.
D262	$-N^+(CH_3)_3$	Cl^-	≥2.6	≥0.8	≥95	45-55	0.68-0.78	≥90	Cl→OH 8-10	OH 40 Cl 100	1-14	Milky white to pale yellow globular granules	Remove waste organic matter in water supply.
D284	$-N^+(CH_3)_2C_2H_4OH$	Cl^-	≥3.4	≥1.33	≥95	45-55	0.66-0.71	≥90	Cl→OH 8-10	OH 50 Cl 100	1-14		Pure water manufacturing.
D201GF	$-N^+(CH_3)_3$	Cl^-	≥4.0	≥0.8	≥95	60-70	0.66-0.70	≥90	Cl→OH 12-18	OH 40 Cl 100	1-14	Pale yellow opaque globular particles	Used for assimilation of glucose isomerase.

Styrene Series Macroporous Weak Base Anion Exchange Resin

Styrene Series Macroporous Weak Base Anion Exchange Resin													
Sanxing	Functional Groups	Ionic form	Mass exchange capacity (mmol/g)	Volume exchange capacity (mmol/ml)	(0.315-1.25mm) Particle size range%	Moisture content%	Bulk density (g/ml)	Sphericity after attrition%	Reversible swelling%	Temperature limit (℃)	PH range	Appearance	Applications
D301	$-N(CH_3)_2 \cdot H_2O$	free amine	≥4.8	≥1.45	0.315-1.25mm ≥95	48-58	0.65-0.72	≥90	OH→Cl ≤28	OH≤100 Cl≤40	1-9	Pale yellow opaque globular particles	It is mainly used in purification, ash removal and decolorization of sugar solution, decolorization of xylose, desalination and decolorization of starch sugar and water 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.
D301-SC	$-N(CH_3)_2 \cdot H_2O$	free amine	≥4.8	≥1.45	0.315-0.63mm ≥95%	48-58	0.65-0.72	≥90	OH→Cl ≤28	OH≤100 Cl≤40	1-9		
D301-FC	$-N(CH_3)_2 \cdot H_2O$	free amine	≥4.8	≥1.45	0.450-1.25mm ≥95	48-58	0.65-0.72	≥90	OH→Cl ≤30	OH≤100 Cl≤40	1-9		
D301G	$-N(CH_3)_2 \cdot H_2O$	free amine	≥4.2	≥1.3	0.60-1.50mm ≥95	50-60	0.65-0.72	≥95	OH→Cl ≤28	OH≤100 Cl≤40	1-9	Milky white opaque globular granules	It is mainly used in hydrometallurgy, extracting the gold from the ore slurry and manufacturing pure water and high purity water.

Epoxy Series And Phenolic Aldehyde Series Ion Exchange Resin

Epoxy Series And Phenolic Aldehyde Series Ion Exchange Resin													
Sanxing	Functional Groups	Ionic form	Mass exchange capacity (mmol/g)	Volume exchange capacity (mmol/ml)	(0.315-1.25mm) Particle size range%	Moisture content%	Bulk density (g/ml)	Sphericity after attrition%	Reversible swelling%	Temperature limit ° C	PH range	Appearance	Applications
330 (701)	$-NH_2$	Free Base	≥9.0	/	10-50mesh ≥90	60-70	0.70-0.80	/	OH→Cl ≤28	OH≤100 Cl≤40	1-10	Golden yellow spherical particle	Mainly used to remove Cl- and SO2- plasma in water treatment. Purification of citric acid, streptomycin, malic acid and amino acid Remove inorganic acids, extract organic acids and decolorize, Extract copper and silver ions.
122(H)	$-COO^-$	H^+	≥4.0	≥1.0	10-50mesh ≥90	60-80	0.70-0.80	/	H→Na ≤55	120	5-14	Orange to brown spherical particle	Mainly used to remove Cl- and so2-plasma in water treatment. Purification of citric acid, streptomycin, malic acid and amino acid Remove inorganic acids, extract organic acids and decolorize, Extract copper and silver ions.

Acrylic Acid Series Gel And Macroporous Weak Acid Cation Exchange Resin

Acrylic Acid Series Gel And Macroporous Weak Acid Cation Exchange Resin												
Sanxing	Functional Groups	Ionic form	Mass exchange capacity (mmol/g)	Volume exchange capacity (mmol/ml)	(0.315-1.25mm) Particle size range%	Moisture content%	Bulk density (g/ml)	Sphericity after attrition%	Reversible swelling%	Temperature limit ° C	PH range	Appearance	Applications
110	-COO^-	Na^+/H^+	≥12.0(H)	≥4.0(H)	≥95	52-62 (H)	0.68-0.82 (H)	≥70	H→Na 70-75	100	5-14	Nearly milky translucent globular granules	Water treatment, electroplating and nickel wastewater treatment, pharmaceutical industry, etc.
JK110	-COO^-	H^+	≥12.5(H)	≥4.0(H)	≥95	52-62 (H)	0.75-0.85 (H)	≥90	H→Na ≤100	100	5-14		Water treatment, electroplating and nickel wastewater treatment, pharmaceutical industry, especially suitable for floating wind adsorption streptomycin and other water dealkali softening, desalination.
DK110	-COO^-	H^+	≥8.0(H)	≥3.0(H)	≥95	52-62 (H)	0.70-0.80 (H)	≥90	H→Na ≤75	100	5-14		Heavy metal recovery, streptomycin, lysozyme extraction and purification, sugar deashing.
724	-COO^-	H^+	≥9.5(H)	≥4.1(H)	≥90	45-55	0.70-0.78	≥90	H→Na ≤70	100	5-14	White translucent spherical particles	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	-COO^-	H^+	≥10.8(H)	≥4.4(H)	≥95	45-52	0.72-0.80	≥90	H→Na ≤70	100	4-14	Opalor yellowish opaque globular granules	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 hydrogen carbonates, carbonates and other alkali salts. It is also used in industrial wastewater treatment, metal recycling, separation and purification of biochemical pharmaceuticals etc.
D113FC	-COO^-	H^+	≥10.8(H)	≥4.4(H)	0.450-1.25mm ≥95	45-52	0.72-0.80	≥90	H→Na ≤70	100	4-14		
CD-180	-COO^-	Na^+	≥8.0(H)	≥2.2(H)	0.16-0.42mm ≥90	60-70	0.75-0.85	≥90	H→Na 75-80	100	4-14	Milky white opaque globular granules	It is used in extraction of amikacin, sisomicin, tobramycin and other aminoglycosides antibiotics.
D151 (D152)	-COO^-	Na^+	≥8.0(H)	≥2.0(H)	≥95	60-70	0.70-0.80	≥90	H→Na 75-80	100	4-14		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 removal.

Acrylic Acid Series Gel And Macroporous Strong Base/ Weak Base Anion Exchange Resin

Acrylic Acid Series Gel And Macroporous Weak Base Anion Exchange Resin													
Sanxing	Functional Groups	Ionic form	Mass exchange capacity (mmol/g)	Volume exchange capacity (mmol/ml)	(0.315-1.25mm) Particle size range%	Moisture content%	Bulk density (g/ml)	Sphericity after attrition%	Reversible swelling%	Temperature limit ° C	PH range	Appearance	Applications
312	$-N(R_2)_2 \cdot H_2O$	Free Base	≥5.3	≥1.6	≥95	56-63	0.66-0.74	≥90	OH→Cl ≤28	OH ≤100 Cl ≤40	1-10	Pale yellow opaque globular particles	High organic matter, high salt content of water in the preparation of pure water, biochemical pharmaceutical.
D311	$-NH_2$		≥7.0	≥2.2	≥95	55-65	0.70-0.80	≥95	OH→Cl ≤25	OH ≤100 Cl ≤40	1-9	Creamy white to light yellow opacity spherical particles	It is mainly used for drug extraction, acid removal and decolorization of sugar solution, water treatment and citric acid extraction.
D314/D315	$-NH_2$		≥6.0	≥2.0	≥95	52-62	0.70-0.80	≥95	OH→Cl ≤25	OH ≤100 Cl ≤40	1-9		Mainly used in drug extraction, Biological fermentation liquid decolorization, sugar liquid decolorization, Citric acid, lactic acid refining, water treatment applications.
D370	$-N(CH_3)_2 \cdot H_2O$		≥4.4	≥1.2	≥95	50-60	0.66-0.71	≥90	OH→Cl 15-20	OH ≤100 Cl ≤40	1-9		Water treatment, electroplating containing chromium wastewater treatment, good pollution resistance.
D371	$-N(CH_3)_2 \cdot H_2O$		≥4.8	≥1.4	≥95	50-60	0.65-0.75	≥95	OH→Cl 8-13	OH ≤100 Cl ≤40	1-9		
D390	$-NH_2$		≥4.5	≥1.2	≥95	60-65	0.70-0.75	≥90	OH→Cl 20-25	OH ≤100 Cl ≤40	1-9		Pharmaceutical industry, antibiotic extraction and decolorization.
D318	$-NH_2$		≥7.0	≥1.6	≥95	62-72	0.73-0.78	≥90	OH→Cl 25-30	OH ≤100 Cl ≤40	1-9	Pale yellow to yellow opaque globular particles	
D392	$-NH_2$		≥4.8	≥1.4	≥95	53-58	0.67-0.73	≥90	OH→Cl 20-25	OH ≤100 Cl ≤40	1-9		
D380	$-NH_2$		≥6.5	Streptomycin adsorption ≥200,000 units/ml	≥95	50-60	0.65-0.75	≥90	OH→Cl 40-60	OH ≤100 Cl ≤40	1-9		Streptomycin extraction, citric acid and other organic acid decolorization.
D382	$-NHCH_3$		≥3.5	≥1.2	≥95	40-50	0.66-0.70	≥90	OH→Cl 17-19	OH ≤100 Cl ≤40	1-7		Weak acid refining, strong separation of weak acid.
D941	$-NH_2$		≥6.5	≥2.0	≥95	55-65	0.70-0.80	≥95	OH→Cl ≤25	OH ≤100 Cl ≤40	1-9	Creamy white to light yellow opacity spherical particles	It is mainly used for decolorization and purification of sugar and other food industry, stevia, ginsengsaponin, panax notoginseng saponin, antibiotics and other natural medicines.
213	$-N^+(R_3)$	Cl^-	≥3.5	≥1.2	≥95	54-64	0.68-0.75	≥90	OH→Cl 5-15	Cl ≤60 OH ≤40	1-14	Colorless	Clear Gel-type. Excellent organic fouling resistance. Widely used in demineralization and discoloration.
D213	$-N^+(R_3)$	Cl^-	≥3.5	≥0.8	≥95	65-72	0.65-0.73	≥90	OH→Cl 1-5	Cl ≤60 OH ≤40	1-14	White to light yellow	Macroporous type. Organic scavenger. Excellent organic fouling resistance. Widely-based in discoloration.

Regenerable And Non Regenerable Mixed Bed Resin

Sanxing	Functional Groups	Ionic form	Volume exchange capacity (mmol/ml)		Moisture content%	Bulk density (g/ml)	(0.315-1.25mm) Particle size range%	Temperature limit ° C	PH range	Appearance	Applications
MB300	001X7H:50% 201X70H:50%	阳树脂(Cation): ≥99% H 阴树脂(Anion): ≥90% OH	H:1.9	OH: 1.0	50-60	0.72-0.76	0.315-1.25mm ≥95	001X7H:100 201X70H:60	1-14	Amber colored globular granules	Used for the preparation of deionized water and ultra-pure water.
MB400	001X7H:40% 201X70H:60%	阳树脂(Cation): ≥99% H 阴树脂(Anion): ≥90% OH	H:1.9	OH: 1.0	50-60	0.71-0.74	0.315-1.25mm ≥95	001X7H:100 201X70H:60	1-14		

Food Grade Ion Exchange Resin

Food Grade Ion Exchange Resin															
Sanxing	Functional Groups	Ionic form	Mass exchange capacity (mmol/g)	Volume exchange capacity (mmol/ml)	(0.315-1.25mm) Particle size range%	Moisture content%	Bulk density (g/ml)	Sphericity after attrition%	PH range	Color through (APHA)	Reversible swelling%	Temperature limit ° C	PH range	Appearance	Applications
001X7	$-SO_3^-$	Na^+	≥4.5	≥1.9	≥95	45-50	0.77-0.87	≥95	7.0-10.0	≤25	Na→H ≤10	H 100 Na 120	1-14	Brown yellow to brown grey color beads	Hard water softening, pure water manufacturing, with good exchange capacity and physical stability.
001X8	$-SO_3^-$	Na^+	≥4.5	≥2.0	≥95	42-48	0.78-0.88	≥95	7.0-10.0	≤25	Na→H 7-9	H 100 Na 120	1-14		
001X10	$-SO_3^-$	Na^+	≥4.2	≥2.2	≥95	38-45	0.82-0.92	≥95	7.0-10.0	≤25	Na→H 3-5	H 100 Na 120	1-14		
D113	$-COO^-$	H^+	≥10.8	≥4.4	≥95	45-52	0.72-0.80	≥95	/	/	H→Na ≤70	100	4-14	Opal or yellowish opaque globular granules	Use 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 hydrogen carbonates, carbonates and other alkali salts.

Chelation Resin

Chelation Resin													
Sanxing	Functional Groups	Ionic form	Mass exchange capacity (mmol/g)	Volume exchange capacity (mmol/ml)	(0.315-1.25mm) Particle size range%	Moisture content%	Bulk density (g/ml)	Sphericity after attrition%	Reversibee swelling%	Temperature limit ° C	PH range	Appearance	Applications
S400	Imine diacetoxyl	Na^+	≥2.00(Cu^{2+})	≥0.6 (Cu^{2+})	≥95	52-58	0.72-0.78	≥90	Na→H <40	80	1-14	Milky white beige ball granules	This product can fix and chelating one or several kinds certain cation in a great range even in the solution with high content. It is used mainly to separate and recover the precious metals ion
S600	aminophosphonic acid	Na^+	≥1.45(Ca^{2+})	≥0.5(Ca^{2+})	≥95	52-58	0.72-0.78	≥90	Na→H <45	80	1-14	Grey	
S700	Thioureido	Cl^-	/	≥1.0	≥95	52-60	0.65-0.77	≥90	/	80	1-14	Milky white	It is mainly used for the separation and purification of precious metal ions.

Macroporous Adsorption Resin

Macroporous Adsorption Resin									
Sanxing	Relative surface area(m^2/g)	average pore size(nm)	(0.315-1.25mm) Particle size range%	Moisture content%	Bulk density (g/ml)	Temperature limit ° C	Appearance	Molecular polarity	Applications
YPR- II (DA100X3)	520-570	9-10	≥95	45-55	0.67-0.73	120	Milky white (Dry) Translucence (Wet)	Non-polar	It is used for the adsorption of abamecia, ivermecia, 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.
D1300	460-500	9-10	≥95	≤70	0.65-0.75	120			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.
D1400	460-500	9-10	≥95	≤70	0.65-0.75	120			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.
D101	550-650	9-10	≥95	65-75	0.65-0.75	120	Milky white opaque globular granules		Extraction and refinement of natural drugs such as ginsenosides, panax notoginseng saponins, double twist, ginkgo flavones, tea polyphenols, soybean isoHavones, puerarin, glycyrrhizin and chlorophyll.
D101-1	600-700	9-10	≥95	65-75	0.65-0.75	120	Milky white opaque globular granules		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.

Macroporous Adsorption Resin								
Sanxing	Relative surface area(m^2/g)	average pore size(nm)	(0.315-1.25mm) Particle size range%	Moisture content%	Bulk density (g/ml)	Temperature limit ° C	Appearance	Molecular polarity	Applications
X-5	500-600	28-30	≥95	53-63	0.61-0.71	120	Milky white opaque globular granules	Non-polar	Mainly used for antibiotics, pigment extraction, Chinese herbal medicine separation and extraction, organic wastewater, uremia patients blood removal of molecular substances, etc.
D3520	480-520	8-9	≥95	70-80	0.60-0.70	120			Protein extraction, decolorization, desalination, etc.
NKA	550-600	20-22	≥95	62-72	0.61-0.71	120			Mainly used forsaponin extraction and so on.
H103	900-1100	8-10	≥95	45~55	0.70-0.75	120	Brown to brown opaque globular particles		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, naphthalene sulfonolin wastewater.
AB-8	480-520	13-14	≥95	60-70	0.62-0.72	120	Milky white opaque globular granules	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 and clocomycin phosphoric acid.
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 isoHavones, tea polyphenols and other natural medicines.
DM301	330-380	13-17	≥95	65-75	0.62-0.72	120		Mid-polar	It is suitable for organic compounds with weak polarity and polarity, such as ginkgo flavone, stevioside, tea polyphenols^ etc.
ADS-17	90-150	25-30	≥95	52-62	0.65-0.75	120			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	Reddish-brown opaque globular granules	polarity	Removal of phenols and organic compounds.
NKA-9	250-290	13-17	≥95	65-75	0.65-0.72	120	Milky white to light yellow opaque globular granules		For bilirubin removal, alkaloid separation, Havonoids extraction, etc.
S-8	100-120	28-30	≥95	66-72	0.60-0.70	120	Milky yellow opaque globular granules		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.

Macroporous Adsorption Resin									
Sanxing	Relative surface area(m^2/g)	average pore size(nm)	(0.315-1.25mm) Particle size range%	Moisture content%	Bulk density (g/ml)	Temperature limit ° C	Appearance	Molecular polarity	Applications
DA201	150-200	23-25	≥95	65-75	0.62-0.72	120	Milky white opaque globular granules	polarity	The extraction of 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 offixed phase for the enrichment of trace elements.

Macroporous adsorption resin specification standards, residue limits, safety in strict accordance with the national drug evaluation center "macroporous adsorption resin separation and purification of traditional Chinese medicine extraction" requirements, styrene skeleton macroporous adsorption resin residue: benzene <2ppm, toluene <890ppm, dimethyl <2170ppm.The total residue of styrene, alkane, diethyl benzene and resin is lower than the national standard or the international standard. The safety of non - benzofenyl matrix macroporous adsorbents should be increased in animal experiments. lt is suggested that the specific column amount, specific adsorption amount, specific elution amount, retention rate and purity should be used to evaluate the purification effect of adsorption resin, so as to prevent the leakage of effective ingredients.ln general, the purification of the same drug macroporous resin, its adsorption capacity decreased to less than 30%, the resin should not be reused.

INSTRUCTIONS FOR USE OF RESIN

Industrial Softening Resin Pretreatment and Regeneration Methods

1. Pretreatment Method Before First Use

1.1 Purpose of Pretreatment

Before the resin is put into operation, pretreatment is necessary to remove any residual protective liquids, fines, and impurities. It also ensures the resin fully swells and reaches its optimal performance, preventing any early-stage operational issues such as turbidity and abnormal pressure drops.

1.2 Pretreatment Steps

(1) Resin Soaking

Purpose: To ensure the resin is fully hydrated and prevent uneven expansion that could affect performance.

Procedure: Soak the resin in clean water or softened water for 4–8 hours before use.

(2) Backwashing

Purpose: To remove any residual fines, air, or impurities trapped within the resin.

Procedure: Use clean water for backwashing, expanding the resin bed by 50%–70%. Backwash for 15–30 minutes until the effluent runs clear with no suspended solids.

(3) Slow Rinse

Purpose: To further remove surface impurities from the resin, ensuring it is in an optimal condition for use.

Procedure: Rinse the resin bed at 0.5–1 times the normal service flow rate for 10–20 minutes until the effluent is clear.

(4) Optional Salt Conditioning

Purpose: To enhance resin ion exchange capacity, especially when high-quality water is required (e.g., boiler water or electronic-grade water).

Procedure: Use a 5%–8% NaCl solution to condition the resin. The flow rate should be 2–4 BV/h, with a contact time of 20–30 minutes, followed by rinsing until no salty taste remains.

2. Regeneration Method After Saturation

2.1 Purpose of Regeneration

After prolonged use, the softening resin becomes saturated with calcium (Ca^{2+}) and magnesium (Mg^{2+}) ions, reducing its ion-exchange capacity. Regeneration replaces these ions with sodium (Na^{+}), restoring the resin's softening functionality.

2.2 Regeneration Steps

(1) Backwashing

Purpose: To remove fines, air, and accumulated debris from the resin bed.

Procedure: Use clean water to backwash the resin bed, expanding the resin bed by 50%–70%. Backwash for 10–20 minutes until the effluent runs clear.

(2) Salt Water Regeneration

Purpose: To replace calcium and magnesium ions on the resin with sodium ions.

Procedure:

Use an 8%–10% NaCl solution for regeneration.

The flow rate should be 2–4 BV/h (bed volume per hour).

Allow for 30–60 minutes of contact time to ensure full ion exchange.

(3) Slow Rinse

Purpose: To remove residual salt solution and the exchanged calcium and magnesium ions, ensuring the resin is properly regenerated.

Procedure: Rinse the resin bed with clean water at a flow rate matching the regeneration flow rate for 15–30 minutes, until the effluent is free of salty taste.

(4) Fast Rinse

Purpose: To thoroughly flush out any remaining salt and impurities, ensuring the resin is ready for normal service.

Procedure: Use clean water for fast rinsing at the normal service flow rate for 20–30 minutes, until the effluent conductivity is within normal levels.

3. Common Issues and Solutions

3.1 Incomplete Regeneration

Cause: Low salt concentration or poor quality salt; too high of a regeneration flow rate; insufficient backwashing.

Solution: Ensure the use of high-quality NaCl solution, adjust the flow rate, and perform thorough backwashing.

3.2 High Hardness in Effluent

Cause: Incomplete regeneration or insufficient resin capacity.

Solution: Check the regeneration time and salt concentration to ensure a complete regeneration process.

3.3 Short Resin Lifespan

Cause: Contamination of resin by iron, oil, or organic compounds in the water.

Solution: Perform periodic enhanced regeneration or consider adding pre-filtration equipment to reduce contaminant levels.

4. Operational Recommendations

Adjust the regeneration cycle and salt concentration based on the raw water's hardness, iron content, and organic load.

Monitor resin performance regularly, and if the effluent hardness exceeds specifications, regenerate the resin promptly.

When the system is not in use for extended periods, keep the resin wet to prevent damage.

For higher-quality water requirements (e.g., high-purity demineralized water), consider implementing enhanced regeneration procedures with stronger salt solutions.

Storage and Security

It is suitable to storage in wet condition, sealing container or wrappage for this resin, the appropriate storage temperature is 0-25°C; if the storage temperature is lower than 0°C, pellucid salt-saturated fluids should be added into the container, in order to avoid crack and breack of the spherical resins because of the freezing temperature, if not it will lead to bring down the resins’performance; high storage temperature will lead to the dehydrolysis of the resin and accelerate to reduce performance of the functional group of resins.

All Sanxing Ion Exchange Resin Users Will Enjoy Technical Services Within 24 hours!

PACKING INSTRUCTION FOR RESIN

25L woven bag with transparent inner bag; 25kg woven bag with inner bag; 25L PE valve pocket; l cubic foot PE valve pocket . 50L, 150L, 200L plastic bucket with inner bag; 50L, 100L,150L, 200L cardboard bucket with inner bag; ton bag. Domestic sales generally without pallet, But also can palletized based on customers need. Use Sanxing brand bags, neutral bags, or OEM bags.

■ Tray description:
Size:(length X width X height) 110X110X13cm

Weight: 18-22 kg

Material: heat treated tray

■ Punching mode:
Foreign sales use 25 liters of PE packaging bags or 1 cubic foot of packaging bags, when playing, generally:

25 liters of:

Stack 42 or 48 packages on each pallet. (note: 6 packages per layer)

1 cubic foot:

Stack 42 packages on each pallet. (note: 6 packages per layer)

Finally, relevant auxiliary and protective materials are used to reinforce the package of the whole pallet of goods.

Key Application Cases of Sanxing Resin

Field	Cases
Thermal Power	A thermal power plant in Hubei requires high-purity demineralized water for its boiler. Our company uses 201*7MB anion and 001*7MB cation exchange resins in combination to treat the water, removing dissolved salts such as sulfates, chlorides, and nitrates. The result is high-quality demineralized water with a resistivity of ≥6-8MΩ·cm, which exceeds the GB/T12145 quality standards. This solution helps save 6% on procurement costs and extends the lifespan of mixed-bed resins by 10-15%.
Water Treatment Field	A company in Shanghai manufactures a soft water machine that uses our 001*8 cation exchange resins. Through the ion exchange process, the resins remove calcium (Ca^{2+}) and magnesium (Mg^{2+}) ions from the water. This helps prevent scale buildup and extends the lifespan of household appliances, such as washing machines and water heaters, by approximately 20%–45%. A coal chemical plant in Shanxi uses our mixed-bed resins after a secondary RO membrane to prepare high-purity demineralized water. The use of our resins extends their lifespan by 10-15%, and the water quality remains consistently below 0.15μS/cm (25°C) for long-term stability. A chemical plant in Shandong uses our 001*7 sodium ion exchange resins in a boiler heating project to treat water for steam boilers. The process effectively removes calcium and magnesium ions from the raw water, meeting the boiler's feed water quality requirements and ensuring its proper operation. The procurement of our resins helps save approximately 10% on the overall total cost of ownership.
Palm Oil Refining	A palm oil refinery abroad aims to produce high-quality food-grade palm oil using our D151 macroporous weak acid cation exchange resin and D201 macroporous strong base anion exchange resin for decolorization and acid reduction. The resins simultaneously adsorb pigment molecules and exchange free fatty acid anions. This has led to: a. Improved Product Quality: The acid value and chlorophyll content stabilize at the high-end customer requirements, enhancing the product's competitiveness. Removal of metal ions has significantly improved the oil's oxidative stability, extending its shelf life. b. Increased Economic Benefits: Higher refining yield: Compared to traditional alkali refining, the process avoids saponification reactions and soap stock carryover, resulting in 2-4% less oil loss. This additional yield directly converts into profit. Reduced waste treatment costs: The resins can be reused hundreds of times, producing far less waste liquid compared to the large amounts of soap stock and spent bleaching earth generated in traditional alkali refining, reducing both environmental impact and economic costs. c. Significant Environmental Benefits: The process achieves a "near-zero solid waste" refining process, aligning with global trends in green manufacturing. d. Extended Resin Lifespan: The use of our resins extends their lifespan by approximately 10%.
Sugar Industry	A high fructose corn syrup factory in China uses our D001 food-grade macroporous strong acid cation exchange resin and D301 macroporous weak base anion exchange resin in a two-stage four-column (SAC-WBA-SAC-WBA) ion exchange system to produce high-purity glucose syrup. The system effectively reduces the electrical conductivity and ash content of the syrup, with ash content maintained at ≤ 0.02-0.05%. It also improves heat stability and color performance, resulting in high product purity, strong heat stability, and stable, reliable production. The lifespan of the resins is extended by 10-15%. A sugar factory in Guangxi faces challenges with high color and purity in its sugar. The factory uses our D213 acrylic acid-based macroporous strong base anion exchange resin for decolorization, along with D201 macroporous strong base anion exchange resin and D113 macroporous weak acid cation exchange resin for purification. These operations reduce the sugar color to below 45 ICUMSA and the ash content to below 0.05%.

Other Food Products	A juice factory in Jiangsu uses our D315 macroporous weak base anion exchange resin to reduce the high acidity of concentrated apple juice while maintaining the juice's natural flavor and sweetness without introducing off-flavors. The resin is used in an acid removal system before the concentration process, where the juice passes through the resin bed at a specific flow rate, continuously removing acid. This results in a significant improvement in the sugar-acid ratio and a balanced sweet and sour taste. Compared to adding sugar or chemical neutralizers, resin-based acid removal is a more natural physical-chemical method, as it does not introduce new chemicals into the juice, helping to preserve its original flavor. The procurement of these resins saves 3-4% in costs. A citric acid factory in Shandong uses our D315 acrylic acid-based weak base anion exchange resin and D001 macroporous strong acid cation exchange resin to remove impurities from citric acid and reduce ash content. The ash content is typically reduced by more than 90%. The resins have a high ion-exchange capacity, fast exchange rate, and high regeneration and elution efficiency. The process is simple to operate, easy to automate, and supports continuous pipeline production. It also reduces evaporation energy consumption, does not produce calcium sulfate waste, and is environmentally friendly.
Chemical Industry	A chlor-alkali production company in Shandong uses our chelating resin S400 for secondary brine refining. The resin selectively adsorbs remaining divalent cations such as Ca^{2+}, Mg^{2+}, and Sr^{2+}, ensuring that the refined brine contains $Ca^{2+} \leq 2\mu g/L$ and $Mg^{2+} \leq 1\text{-}5\mu g/L$. The brine is then filtered through a precision filter (0.2μm membrane) to remove any fine resin particles, resulting in qualified electrolyte-grade brine. The procurement of these resins reduces costs by 8%. An MTBE (methyl tert-butyl ether) production company abroad uses our macroporous strong acid cation exchange resins as catalysts. Due to their high porosity and strong acidity, these resins achieve high conversion rates (95-97%) and outperform traditional catalysts, offering a longer lifespan. A 1,4-butanediol (BDO) production company abroad uses our resins (strong acid cation resins, acrylic acid resins, and strong base anion resins) to purify the intermediate product BYD, improving its quality and recovery rate. This ensures the activity of the hydrogenation catalysts and extends the catalyst lifespan by 30%-50%. The process also effectively increases BDO yield and quality, reduces the BYD content in deionized wastewater, lowers wastewater volume, minimizes BYD material loss, and reduces wastewater treatment costs. A caprolactam (CPL) production company abroad uses our strong acid cation exchange resins and strong base anion exchange resins to purify caprolactam. The resin-refined caprolactam has a more controllable polymerization degree, higher whiteness, and better final product performance. The resin system has high automation and low regeneration costs. The procurement of these resins helps reduce costs by 6-7%.
Mining Industry	A mining company abroad uses our D301G macroporous weak base anion exchange resin to recover gold. The resin has an adsorption capacity of 20–50gAu/L, a desorption rate of >95%, and a lifespan of 1–3 years (depending on the quality of the cyanide liquid). The resin has strong resistance to organic contamination, higher selectivity for $Au(CN)_2^-$, low desorption energy consumption, high mechanical strength, and is resistant to wear. A company in Jiangxi uses our strong base anion exchange resins to recover molybdenum from the leachate of smelting waste acid. The molybdenum recovery rate is ≥95%, the secondary solid waste generated is minimal, and it is easier to obtain a high-purity product, which facilitates subsequent evaporation and crystallization. A battery recycling plant in Guangdong uses our chelating resins for nickel-cobalt separation. This method has high adsorption efficiency for low-concentration ions, with a recovery rate of >95%, high separation accuracy, and product purity reaching 99%. It also generates minimal wastewater discharge, making it suitable for environmentally demanding scenarios. A uranium mining plant abroad uses our D301G macroporous weak base anion exchange resin to recover uranium. The total recovery rate of uranium adsorption and desorption can reach 95–99%, with an input uranium concentration of 10–150mg/L and an output uranium concentration of <1mg/L. This process has lower energy consumption compared to solvent extraction, with no organic solvent loss or safety risks. The equipment can be modular and automated, making it suitable for large-scale continuous operation in in-situ mining.

Ultrapure Water	An electronics factory in Zhejiang uses our MB400 polishing resins for the final treatment in its ultrapure water preparation system. The resins effectively remove trace ions, silica, boron, total organic carbon (TOC), and submicron particles remaining after pre-treatment with reverse osmosis (RO), electro-deionization (EDI), and other processes. The performance advantages are clear: a. Excellent Purity Enhancement: The resin consistently produces ultrapure water with a resistivity of over 17 MΩ·cm. b. Efficient Boron and Silica Removal: The resin excels in deeply removing boron and silica. c. Extremely Low Ion Content: It effectively removes trace cations and anions in the water. d. Cost Efficiency: The resin has a long lifespan, reducing replacement frequency and regeneration costs. Overall, the use of our resins results in a 10% reduction in the customer's overall operating costs. This is due to both the cost-effectiveness of our resins and their high quality, which extends their lifespan. A mobile phone accessory manufacturer in Nanjing uses our MB400 polishing resins to prepare high-purity water for precision assembly cleaning and plastic lens cleaning. The resins effectively remove particles and ions, ensuring that the product quality meets the required standards. The procurement of these resins has resulted in a 10% reduction in procurement costs. In the hard disk manufacturing process, mixed-bed polishing resins from our company are used to prepare high-purity water for cleaning equipment, tools, and intermediate processes, ensuring that product quality meets the required standards. The procurement of these resins has resulted in a 10% reduction in procurement costs.
Pharmaceuticals	A food-grade lysine production company in Hebei uses our macroporous adsorption resins for decolorization and purification. The strong acidic cation exchange resins (H-type) selectively capture lysine molecules by adsorbing the positively charged lysine at precisely controlled pH conditions, while excluding a wide range of non-target substances such as sugars, pigments, bacterial proteins, and neutral impurities from the fermentation broth. This process effectively removes many unknown by-products and potentially harmful impurities generated during fermentation, ensuring a solid foundation for the food safety of the final product. The resin system achieves an adsorption rate for lysine of over 95%, meaning the vast majority of the target product is recovered from the fermentation broth, significantly reducing raw material and energy waste. The use of ion exchange resins is a key technology for achieving efficient, economical, and high-purity food-grade lysine production, which is essential for meeting food-grade standards for the final product. A pharmaceutical company in Anhui uses our MB400 polishing resins after EDI equipment to prepare ultrapure water. The water conductivity is stabilized at 18MΩ·cm (25°C), with TOC content <5μg/L, ensuring the safety and efficacy of the pharmaceutical production process. The procurement of these resins has resulted in a 10% reduction in procurement costs. A pharmaceutical company in Jiangsu uses our D101 macroporous adsorption resins to extract total flavonoids from kudzu. The resin has strong selectivity, significantly improving the purity of the flavonoid product by removing sugars, polyphenols, and pigments. The adsorption/elution efficiency is high, with final product yield reaching 75-90%. The process is cost-effective, the resin is regenerable, and it is suitable for industrial continuous production. It also provides good protection for heat-sensitive flavonoids.

RESIN TYPE COMPARISON TABLE

Sanxing closest competitive equivalents							
Sanxing Resin	Purolite	Rohm & Haas		Dow Dowex	Bayer	Sybron	Mitsubishi Diaion
		Amberlite	Duolite				
Cation Exchange Resin							
001x4		IRA118					SK104
001x7Na	C-100E	IR-120 PLUS		HCR-S(E)S	S-100LF	C-240	
001X7H	C-100H	IR-120H	C-20H		S-100LF(H)	C-242	
001X8	C-100	IR-120	C-20/225	HCR-S(E)	S-100	C-249	SK1B
001x10	C-100X10	IR-122	C-20X10/255	HCR		C-250	SK110
D001	C-150/155	AMB200/IR-252	C-26S	MSC-1	SP-120	CFP-110	PK-228
110	C-105	IRC-84	C-433	CCR-2	CNP		WK-40
D113-III,D152	C-104	IRC-76/86	C-464	MAC-3	CNP-80	CCP	WK-20
SX-1200	PFC-100	AMBJ-1200		MRTHONC			SK1BL
D150	C115E	IRC-50	WT01S				
SXC-9		A21/15Dry					
Anion Exchange Resin							
330/331			A-30B				
201x4	A-400	IRA-402	A-113	SBR-P	M-504	ASB-P	SA12A
201x7	A-600	IRA-400	A-109	SBR-C	M-500	ASB-1	SA10A
202-11	A-300/ A-300E	IRA-410	A-102D/A-104	SAR	M600/610	ASB-2/ A-550	SA20A
213	A850E	IRA458			VPOC1071	A475	
D201	A-500	IRA-900	A-161	MSA-1	MP500	A-641	PA-312
D202	A-510	IRA-910	A-162	MSA-2	MP-600	A-651	PA-412
D301-III	A-100	IRA-93/94	A-392S	MWA-1/66	MP-62	AFP329	WA-30
D301G	A100E	IRA93/95/96		MWA-1	MP64		WA30
D314/D315	A-845	IRA-67			AP49		WA10/11
312	A845/847	IRA67	WA11		VPOC1072		
D318	A830	IRA68			AP49		A375
D218	A-870	IRA-478			AP-246		
Chelating Resin							
S400	S-930	IRC-748	C-466	XZ95843	TP-207/208	SR-5	CR-11
S600	S940	IRC-747	C467	XZ87480	TP260		
Mixed Bed Resin							
MB400	NRW-37	IRN150	ARM-381	MR-3			MI-7000G
Macroporous Adsorption Resin							
D101		XAD-2					HP-20
AB-8		XAD-4					HP-21