

Stock code: 300487



蓝 / 晓 / 科 / 技 · 创 / 新 / 动 / 力

A global pioneer in adsorption and separation technology



Market Value Around *USD 4-5 billions*

01

- Asian Largest Ion Exchange & Adsorption Resin Producer
- Listed in Stock Market (stock code: 300487)
- Over 1400 Employees Worldwide

R&D: Driven by Innovation

02

- 30% of Employees Are Dedicated to R&D, 70+ Patents
- Research Investment: Over 6% of Company Revenue
- Joint R&D Center with Nankai University;

Top Three in The Industry

03

- In 2022, Sunresin's resin sales was global No.3,
- In 6 applications, Sunresin market share Was World No.1
- Only company integrated solution and equipment package



Sunresin is a multinational enterprise in the field of separation and purification material and equipment solutions.

Product portfolio includes: Ion exchange resins, Adsorbent resins, Catalyst resins, Chelating resins, Chromatography, Enzyme carriers, etc. and adsorption & separation related IX system engineering.

Sunresin has 9 holding and joint-stock subsidiaries and 3 business development centers around the world, with an annual output of 90,000 cubic meters of resin, 200+ resin types in 30+ categories

Serving key industries worldwide



Adsorbents and ion exchange resins suitable for various industries and applications

- Food and beverage processing
- water treatment
- Hydrometallurgy and mining
- Chemistry, Chemical Engineering
- environmental protection
- Chips, nuclear power, etc.



SEPLIFE

Purification, solid-phase synthesis, adsorption, and biocatalytic resins suitable for life science applications

- antibiotic
- Honey
- monoclonal antibody
- Herbal extraction
- Solid phase peptide/oligonucleotide synthesis
- protein
- vaccines
- Messenger ribonucleic acid
- Biocatalysis



Engineering equipment, engineering projects, and technical services

- Fixed bed system
- Simulated Moving Bed (SMB) System
- Chromatographic system
- Solution and troubleshooting
- General contracting project

Largest Portfolio in Resin Technologies

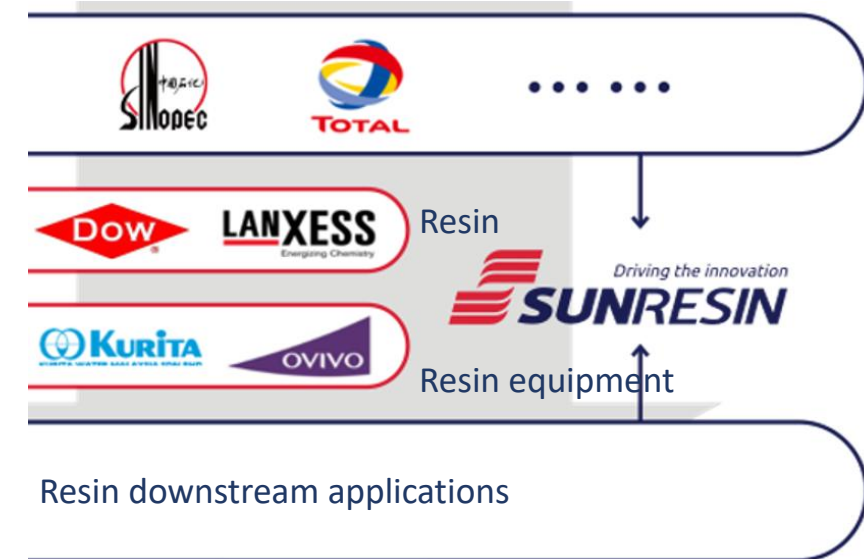
Benchmarking global top companies



	IER	Adsorbent resin	chelating resin	UPS resin	Solid carrier	Chromatography	Enzyme carrier	Agarose
Sunresin	+	+	+	+	+	+	+	+
Dow	+	+	+	+				
Purolite	+	+		+	+	+	+	
Lanxess	+		+					
Mitsubishi	+		+					
GE Healthcare						+		+

The most abundant varieties, the most comprehensive technology coverage, and the most complete application fields

Resin raw materials



Resin + Equipment + Integrated Solution Provider

Monojet (UPS) Technology and Advantage

-Superior kinetics, less pressure drop in system operation

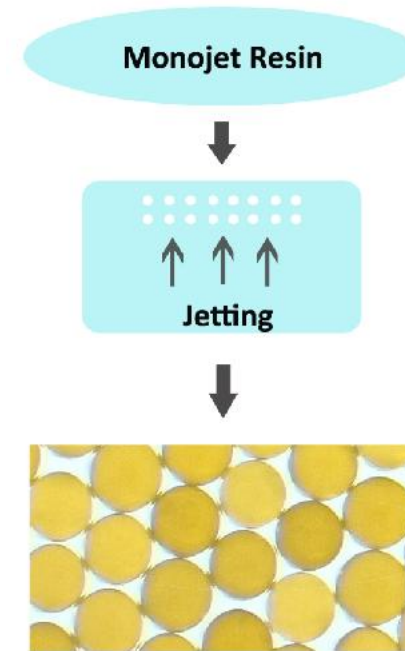
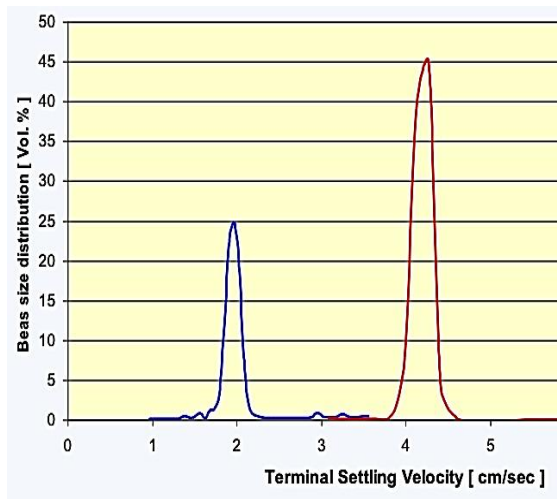
-Higher exchange speed and working exchange capacity

-Excellent mechanical strength

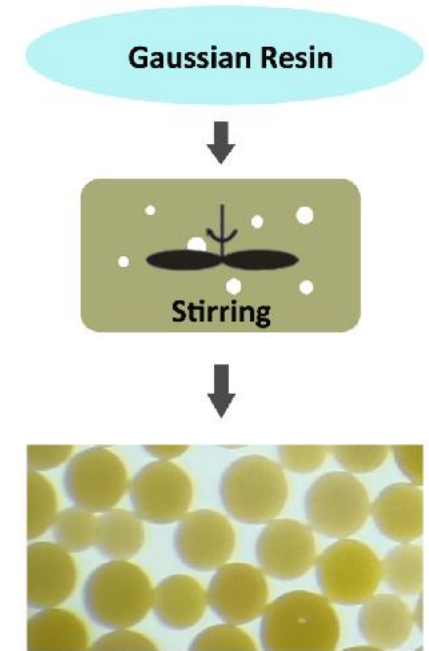
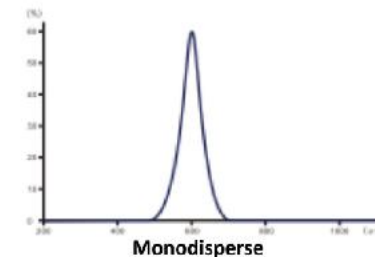
Average crushing strength,
g/ bead: cation resin $\geq$ 500 ; anion resin $\geq$ 350

-Excellent higher temperature resistance

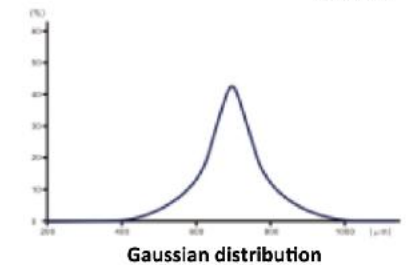
-Excellent separation and regeneration characteristics



UC<1.1



UC<1.65



VS

The uniformity coefficient of Monojet series resin is as low as 1.1, and the proportion of small particle size is extremely low (less than 0.1% of particles below 400 μ m)

Driving global innovation...

Driving the innovation
SUNRESIN



5 ISO-Certified
Plants



>900000m³
Annual Output



1400+
Employees Globally



400+
R&D Scientists



70+
Patents Held



200+
Resin
Chemistries

Key



Manufacturing



R&D Facilities



Warehousing/
Logistics



Business
Center



Headquarter

Administration and Sales department, R&D and engineering system department etc.



Four Factories Introduction (1)

*Gaoling Factory

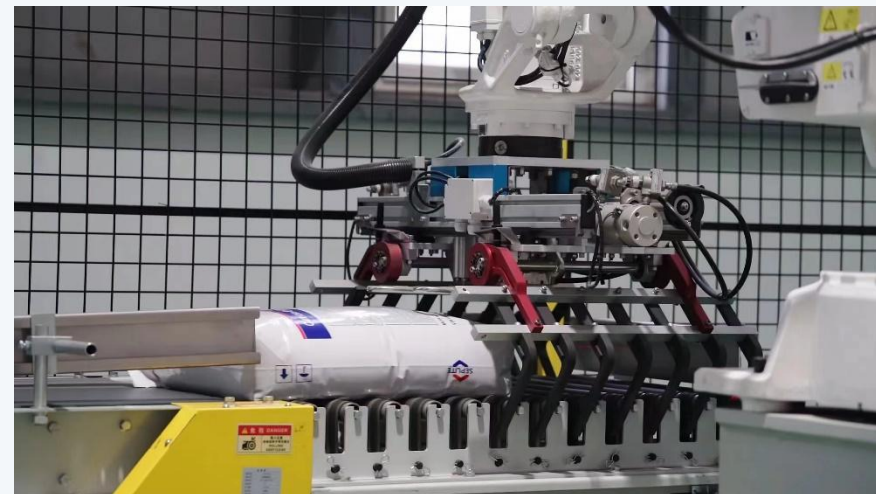
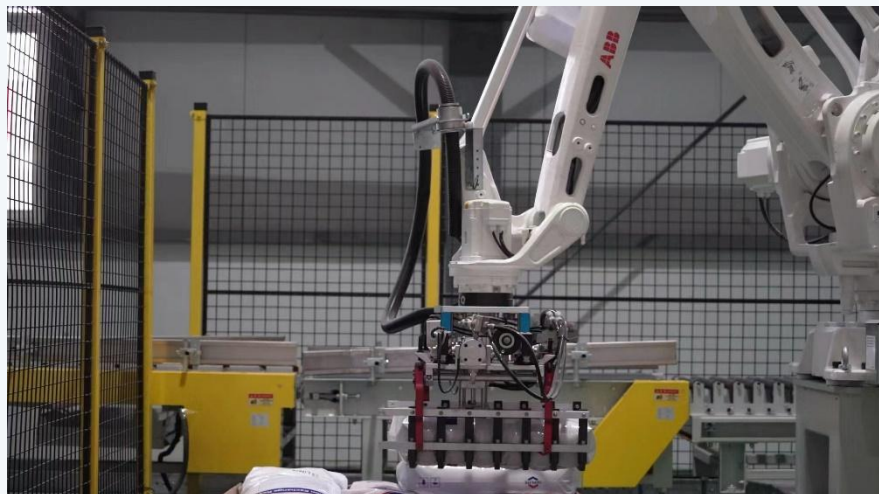
Largest manufacturing base for Specialty Resins



Four Factories Introduction (1)

*Gaoling Factory

Automated packaging and warehousing



Four Factories Introduction (2)

*Pucheng Factory

Manufacturing base for Ion Exchange Resins



Four Factories Introduction (3)

***G1 Factory**

First plant set up in 2004, now Independent manufacturing base for Chelating Resins



Four Factories Introduction (4)

*Equipment Engineering Factory

Equipment Integration Base



*Puritech

Sunresin's branch in Belgium for multi-port valve systems



International top talent team



GM, Mr. Kou Xiao Kang

R&D technology leader

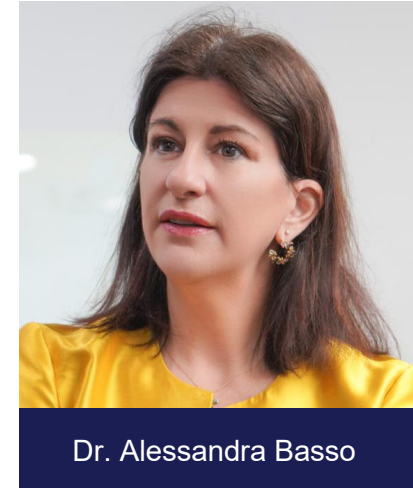
- State Council Special Expert Allowance
- National Science and Technology Progress Award (Second Prize)



VP, Dr. Joe Lin

Purolite's former Senior Technical Director

- Industry-renowned top expert
- The first batch of foreign experts with outstanding contributions



Dr. Alessandra Basso

Former Senior Technical Director of Life Sciences at Ecolab

- Mitsubishi's former Chief Scientist for Global Life Sciences
- Top international experts in life sciences



Dr. Mikhail Mikhaylenko

Purolite's Former Director Technology of Hydrometallurgy

- Purolite's Former Global Hydrometallurgy expert

R&D talent team: 400-person, multi-disciplinary, cross-field, composite, internationally leading professional technical team



Quality-oriented manufacturing



Production control and management

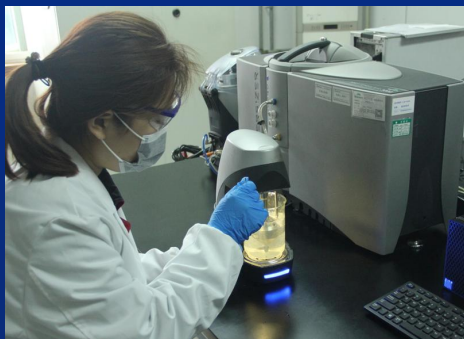
Standard Operation
Procedure (SOP)

Production
automation control

Online monitoring,
data traceability

Quality Control

Mastersizer



**Determination of SBET
and pore size**



FTIR Spectrometer



COD Meter



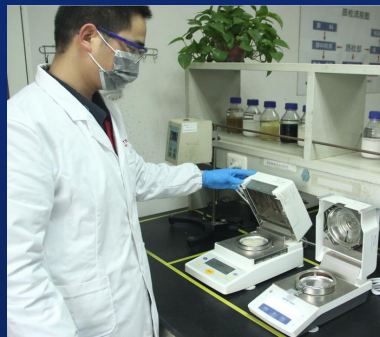
**Agilent high performance
liquid chromatography**



Complete quality management system



Resin strength tester

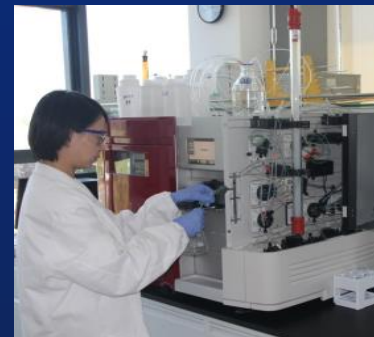


Moisture Analyzer



**Acid-base titration
detector**

Professional testing instruments



AKTA Purifier



ICP

Service & technical support



- Experimental demonstration
- Resin selection
- Process design and optimization
- System and Equipment
- System installation and commissioning
- Technical training for system operation
- Urgent calls 24*365 a year



Typical Applications



Healthcare

APIs.
Herbal Extraction.
Solid Phase Peptide Synthesis.
Chromatography (protein,vaccine).



Food Processing

Juice & Beverage.
Sugar & Sweetener.

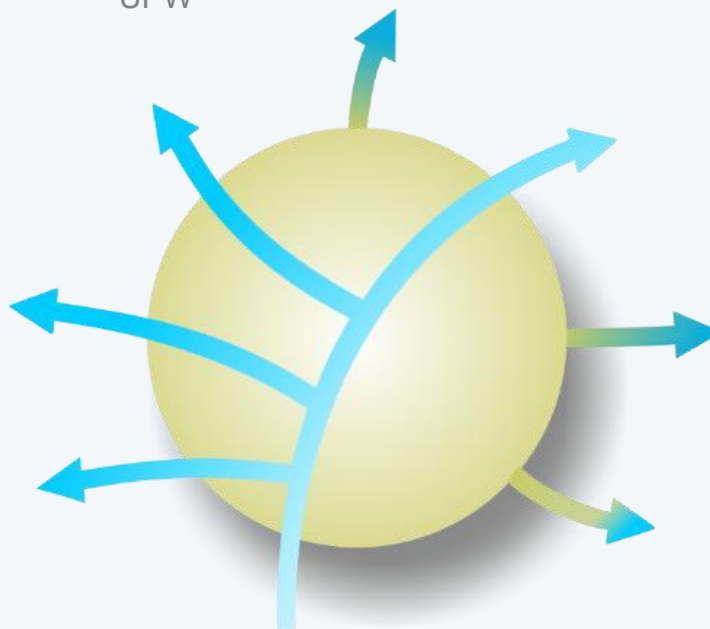


Engineering project & Technical service

Fixed Bed
Simulated Moving Bed (SMB).
Solution Pack.
EPC project

Water Treatment

IWT
Municipal water treatment
Drinking water
UPW



Metal Extraction

Lithium, Nickel, Cobalt Extraction
Gallium, Indium from Semi-conductor
Materials.
Gold, Uranium Extraction.



Chemical Processing

Brine Purification.
Hydrogen Peroxide
Petroleum and Chemical Catalysts.



Environmental protection

Heavy-polluted Organics Waste Water Recovery.
Heavy-metal Waste Water Recovery.
VOCs gas treatment



1. Food Processing, Sugar & Sweetener industry



- Juice quality control— remove patulin, pesticide etc., improve the color & stability. Global market leadership.
- Remove antibiotics from honey—Global market leadership.
- Preparation & refinement of sugar-deashing & decolorization
- Sweeteners, substitute sugar - deashing, decolorization & chromatographic separation
- Amino acid- purification



2. Healthcare

- **Pharmaceutical resins**—used for the extraction and separation in bulk drug and intermediate. CPC resins occupied **over 50%** market .
- **Immobilized enzyme carrier.**
- **Herbal extraction**—leadership in the market shares especially for stevia.
- **Solid phase peptide**—used in the synthesis of polypeptides.
- **Chromatography media**--used for the purification of recombinant protein, production of nucleic acid, separation and purification of biological macromolecule in the bio-pharmaceuticals and bio-engineering industry.



3. Metals Extraction (Mining)

Reference application:

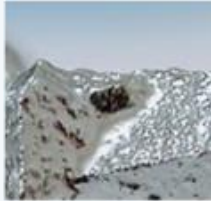
- **Lithium extraction** from salt lake brine.

Typical cases: Zangge Holding(10,000 t/a, 83M USD)

Jintai Ltd.(3000 t/a, 68M USD)

Jintai Ltd.(4000 t/a, 93M USD)

- **Gallium extraction** from Bayer liquor in the production of alumina—we provide turn-key solution for the producer, carry out complete EPC project.
- **Gold, Uranium** extraction from mine pulp using RIP technology
- **Nickel** extraction from Laterite nickel ore
- **Scandium, Cobalt, Rhenium recovery.**



4. Water & wastewater treatment

Reference application:

- Industrial & Civil water softening & demineralization for various industries
- Condensate polishing for power plants, nuclear plants, petrochemicals plants etc.
- Pure & ultrapure water for Electronics, Semiconductor, Solar etc.
- Potable water softening & selective removal, like for food & beverage, households filters etc.



5. Chemicals & Catalyst

Reference application:

- Brine softening in Chlor-alkali plants – China market share over 60%
- H₂O₂, Caprolactam purification – reduce TOC, alkalinity and volatile alkalinity
- Catalyst resins for MTBE, TAME, Phenol, Biodiesel, Oleochemicals etc



6. Engineering systems & projects



ION EXCHANGE SYSTEM



SMB SYSTEM



SSMB SYSTEM

Project of extraction of lithium from brine



CBD extraction from
industrial hemp



Whole pigment production Line in Turkey



Concentrated juice processing system
in South Africa

7. Environmental protection

Reference application:

- **Organic wastewater treatment** – such as phenols, amine, organic acids, nitro, halohydrocarbon etc.
- **Heavy metals removal from wastewater-** such as Mercury, Cobalt, Nickel, Copper etc.
- **Eliminate COD and color throw** in reclaimed water.
- **Air filtration** for chemical gas filters in Semiconductor Industry
- **CO2 capture** for energy intensive industries
- **VOCs treatment** for low and medium concentration organic volatile substances,



