

## Macroporous Adsorption Resin

### D-101 Net Grade

D-101 net grade macroporous adsorption resin is a non-polar styrene copolymer (cross-linking agent is divinylbenzene, porogen is toluene and octanol), the scope of application is relatively broad spectrum, for non-polar or weak polar The organic compounds are generally strong in adsorption, especially for the separation and purification of saponins. They are also suitable for flavonoids and alkaloids. For example: ginsenosides, panax notoginseng saponins, diosgenin, ginkgo flavonoids, etc.

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Name	Specification
Appearance	Milky white opaque spherical beads.
The structure of resin	PSD
Polarity	Nonpolar
Moisture	65%~75%
Particle size range	(60~16 mesh )0.3~1.25mm≥95%
Average pore size	9-11 nm
Pore volume	1.50-1.70ml/g
Apparent density	0.32-0.36g/ml
Skeleton density	0.81-0.85g/ml
Real Density (g/ml)	1.15-1.19g/ml
Bulk Density (g/ml)	0.65-0.70g/ml
Specific surface area	550-600 m <sup>2</sup> /g
Adsorption capacity	≥45mg/g

## Residue control indicators

Name	Standard
Benzene	$\leq 0.001\%$
Toluene	$\leq 0.002\%$
Xylene	$\leq 0.002\%$
Divinylbenzene	$\leq 0.001\%$
Ethyl styrene	$\leq 0.001\%$
Diethylbenzene	$\leq 0.001\%$

## Product Features:

1. The color milky white or light yellow brings convenience to the processing operation, and the separation and purification of the colored organic compounds are easy to observe.
2. The physical and chemical properties are stable, and it is insoluble in any acid, alkali and organic solvent, which is convenient for the selection of adsorbent and desorbent.
3. It has good selectivity to organic matter and is not affected by the presence of inorganic salts.
4. The regeneration is easy. The regeneration agent can be selected from water, dilute alkali, dilute acid or low-boiling organic solvent. Such as: methanol, ethanol, acetone, etc.
5. Good mechanical strength and long normal service life.

## Resin pretreatment

The net grade resin has been deeply processed and can be used directly on the column without pretreatment. For stability, it can be soaked and rinsed with ethanol or double distilled water before use. After the resin is packed into the column, it should be backwashed with water to discharge the gas in the resin, so as not to form a gas barrier to affect the adsorption.

Net grade resin has been deeply processed, and users can directly use it without

pretreatment.

## **Precautions**

1. The resin contains water and should be kept at a temperature of 5-40°C during storage and transportation to prevent freezing at low temperatures and mildew at high temperatures, which affects its use.
2. Because the resin is exposed to the air or loses water for any reason, do not directly inject water to prevent the resin from floating. It can be impregnated with ethanol to restore it to a wet state and then cleaned with water.
3. The adsorbed substance (solution) should be subjected to impurity removal, filtration, and clarification before being put on the column, so as to avoid impurities entering the resin column as far as possible, so as not to cause acute resin poisoning and affect the use.
4. Resin is interrupted. After washing with water, it should be stored in soaked clean water and changed regularly to prevent contamination. It can also be immersed in saturated saline or ethanol for long-term storage.