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## AMBERSEP<sup>®</sup> 252 H

Industrial Grade Strong Acid Cation Exchanger

### Introduction

AMBERSEP 252 H is a macroporous cation exchange resin based on sulphonated crosslinked polystyrene. It has a moderate degree of crosslinking resulting in good regeneration efficiency. It is very resistant to osmotic shock and to mechanical attrition.

AMBERSEP 252 H is designed for use in Ambersep units with AMBERSEP 359 and AMBERSEP 900 OH or AMBERSEP 900 SO<sub>4</sub>.

### Properties

Matrix	Styrene divinylbenzene copolymer
Functional groups	-SO <sub>3</sub> <sup>-</sup>
Physical form	Light grey beads
Ionic form as shipped	H <sup>+</sup>
Total exchange capacity	≥ 1.65 eq/ L (H <sup>+</sup> form)
Moisture holding capacity	52 - 58 % (H <sup>+</sup> form)
Specific gravity	1.18 to 1.22 (H <sup>+</sup> form)
Shipping weight	755 g/ L
Particle size	
Harmonic mean size	0.90 - 1.10 mm
Uniformity coefficient	≤ 1.4
Fine contents	< 0.600 mm : 1.0 % max
Coarse beads	> 1.180 mm : 10.0 % max
Maximum reversible swelling	Na <sup>+</sup> → H <sup>+</sup> : 7 %

### Suggested Operating Conditions

Service flow rate	up to 120 BV <sup>*</sup> / h or 120 m/ h	
Regenerants	HCl	H <sub>2</sub> SO <sub>4</sub>
Flowrate (BV/ h)	4 to 5	4 to 12
Concentration (%)	5 to 6	1.5 to 4
Level (g/ L)	80 to 200	125 to 250
Minimum contact time	30 minutes	
Slow rinse	2 BV at regeneration flow rate	
Fastrinse	2 to 4 BV at service flow rate	

### Hydraulic Characteristics

AMBERSEP 252 H gives a pressure drop of about 6 kPa/ m bed depth per 10m/ h at 15°C.

A backwash flow rate of 30 m/ h gives a bed expansion of about 70 % at 15°C.

### Limits of use

AMBERSEP 252 H is suitable for industrial uses. For other specific applications such as pharmaceutical, food processing or potable water applications, it is recommended that all potential users seek advice from Dow Water & Process Solutions in order to determine the best resin choice and optimum operating conditions.

**For more information about DOW™  
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