

Softening Resin

Strong Acid Cation(Gel)

DOSHION CSA 9L has a GEL Type Strongly Acidic uni-functional cross linked polystyrene structure containing Sulphonic Acid + Na groups. It is a high capacity gel type resin with excellent physical and chemical properties.

Due to the high exchange capacity of **DOSHION CSA 9L**, it is recommended where hardness of Calcium and Magnesium salts are high. The resin is primarily used in industrial water softening application in Na⁺ form.

Properties	
Matrix	Cross linked Polystyrene
Functional group	SO ₃ (Sulphonic)
Ionic Form	Na ⁺ – Sodium
Physical Form	Hard Moist Beads
Particle size (mm)	0.30- 1.20
Moisture Content %	47-53 Na ⁺ form
Total Exchange Capacity (min)(eq/L)	1.9 Na ⁺ form
Bulk Density / Shipping Weight (gm/L)	750-820 Na ⁺ form
Operating pH Range	0-14
Solubility in common solvents	Insoluble
Volume change % (max) : Na ⁺ to H ⁺	10

Operating Conditions		
Operating Temperature (max)	°C	120
Minimum Bed Depth	mm	750
Regenerant Concentration	%	10-16(NaCl) 1-5 (H ₂ SO ₄) ^Φ 4-5 (HCL)
Regenerant Flow Rate	*BV/hr	2 – 8
Regenerant Contact Time	Minutes	30
Regeneration Level	Kg/ m ³ of Resin	60-160 (NaCl) 60-150 (H ₂ SO ₄) 30-150 (HCL)
Displacement Rinse Rate	*BV/hr	2 – 8
Displacement Rinse Volume	#BV	1-2
Fast Rinse Rate	*BV/hr	10-40
Fast Rinse volume	#BV	4 – 10
Service flow rate	*BV/hr	10-40

* Bed Volume/ Hour ; # Bed Volume

Φ Sulfuric Acid concentration must be adjusted according to calcium content in the feed water

Full Range of Ion Exchange Resins

Cation Exchange Resin	Anion Exchange Resin	DM Resin
CSA 121	GA 11	DMB 13
CSA 121 - FG	GA 11 UPS	DMB 13 UPS
CSA 9	GA 12	DMB 13 S
CSA 9 UPS	GA 13	
CSA 9 - FG	GA 13 UPS	
CSA 9 L	ASB 108	
CSA 9 L Na - FG	ASB 171	
CSA 29	ASB 8010 D	
CSA 29 UPS	ASB 8010 D UPS	
CSA 609 D	ASB 8020 D	
CWA 63	AWB 7020 D	
CWA 92 D	AWB 7030 D	
CSA 309	AWB 7050 D	
	AWB 7050 D UPS	
	GA 711	
Special Application Ion Exchange Resin		
DCHR 74	CGC 1200	DBR 108
DCHR 78	CMC 1900	FRC 10
DIRM	CMC 2400	ASB 108 H UPS
DCR 11	DAAR 85	GA 13 H UPS
DMB 10	DAAR 312	CWS 66 D
DMB 11	DAAR 313	IPSR 550
DMB 13 S	DAAR 412	

doshion®
Translating Source Into Resource

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