

Arsenic Removal Media

DOSHION DCHR 78 media is specially designed for the removal of Arsenic present water or wastewater in terms of Arsenate for potable processes. The special exchange group functionality imparts ideal arsenic selectivity to DCHR 78 making this media particularly suitable for Arsenic removal even when moderate to high concentrations of Sulphate are present. Hence this media gives superior performance in Arsenic removal applications when compared with other methods of Arsenic Removal.

Arsenic is present in water in Arsenate and Arsenite forms. Arsenate is a neutral species so for complete removal of Arsenic, it needs to be further oxidized to arsenate for removal as described above. Oxidation can be accomplished by air stripping the water stream or addition of an oxidizing agent like peroxide or ozonolysis.

Characteristics of DCHR 78

- Ideal for removal of Arsenic form water for Potable processes.

Properties	
Functional group	Special Arsenic Selective
Physical Form	Opaque Cream Spherical Beads
Particle size (mm)	0.3- 1.2
Uniformity Coefficient (max)	1.7
Moisture Content, CI form %	50-56
Bulk Density / Shipping Weight (gm/L)	770 - 800
Operating Temperature °C (max)	100
Reversible Swelling Cl- SO ₄ ²⁻ /NO ₃ ⁻ ;	Negligible
Solubility in common solvents	Insoluble

Operating Conditions		
Minimum Bed Depth	Mm	750
Operating pH		4.5 – 8.5
Regenerant Concentration	%	3-10 (NaCl)
Regenerant Flow Rate	*BV/hr	2 – 6
Regenerant Contact Time	Minutes	30
Regeneration Level	Kg/ m ³ of Resin	90-250 (NaCl)
Displacement Rinse Rate	*BV/hr	2 – 5
Displacement Rinse Volume	#BV	2 – 5
Fast Rinse Rate	*BV/hr	8 – 32
Fast Rinse volume	#BV	4 – 10
Service flow rate	*BV/hr	8 – 32

* Bed Volume/ Hour ; # Bed Volume

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

Doshion Poly Science Pvt. Ltd.

Building Number: 9 – 10, Sigma Corporates,
 Off. Sindhu Bhavan Road, Ahmedabad – 380054, Gujarat, India
 +91 079 – 4800 7766 | polymers@doshion.com | www.doshionpoly.com

