

Industrial Water Treatment

PRODUCT NAME	INDION FFIP	INDION FFIP (MB)	INDION NIP
Applications	Demineralization in co-current and counter current mode	Use in mixed bed (Superior sphericity)	Demineralization in co-current and counter current mode
Resin Type	Isoporous Strong Base Anion	Isoporous Strong Base Anion	Isoporous Strong Base Anion
Matrix Type	Crosslinked Polystyrene	Crosslinked Polystyrene	Crosslinked Polystyrene
Functional Groups	Quaternary Ammonium (type-I)	Quaternary Ammonium (type-I)	Quaternary Ammonium (type-II)
Standard Ionic Form	Cl ⁻	Cl ⁻	Cl ⁻
Particle size range – mm	0.3 - 1.2	0.3 - 1.2	0.3 - 1.2
% Moisture	47 - 55	47 - 55	46 - 55
Max. Operating Temperature° C	60 (OH ⁻)	60 (OH ⁻)	40 (OH ⁻)
Total Exchange Capacity, meq/ml	1.2	1.2	1.2
Volume change %	Cl ⁻ to OH ⁻ -10 to -15	Cl ⁻ to OH ⁻ -10 to -15	Cl ⁻ to OH ⁻ -10 to -15

PRODUCT NAME	INDION GS 300	INDION GS 400
Applications	High strength resin for demineralization, condensate polishing and caprolactum purification	High strength resin for water demineralization
Resin Type	Gel Strong Base Anion	Gel Strong Base Anion
Matrix Type	Styrene DVB	Styrene DVB
Functional Groups	- N ⁺ R ₃	- N ⁺ R ₃
Standard Ionic Form	Cl ⁻	Cl ⁻
Particle size range - mm	0.3 - 1.2	0.3 - 1.2
% Moisture	48 - 54	39 - 46
Max. Operating Temperature° C	60 (OH ⁻)	40 (OH ⁻)
Total Exchange Capacity, meq/ml	1.2	1.2
Volume change %	Cl ⁻ to OH ⁻ -25 to -30	Cl ⁻ to OH ⁻ - 25 to -30

PRODUCT NAME	INDION 810	INDION 820	INDION 830
Applications	Demineralization in co-current and countercurrent mode.	Demineralization in co-current and countercurrent mode.	Removal of organics and color from water
Resin Type	Macroporous Strong Base Anion	Macroporous Strong Base Anion	Macroporous Strong Base Anion
Matrix Type	Styrene DVB	Styrene DVB	Styrene DVB
Functional Groups	- N ⁺ R ₃	- N ⁺ R ₃	- N ⁺ R ₃
Standard Ionic Form	Cl ⁻	Cl ⁻	Cl ⁻
Particle size range – mm	0.3 - 1.2	0.3 - 1.2	0.3 - 1.2
% Moisture	56 - 63	49 - 56	57 - 62
Max. Operating Temperature° C	60 (OH ⁻)	40 (OH ⁻)	70 (Cl ⁻)
Total Exchange Capacity, meq/ml	1.0	1.0	0.8
Volume change %	Cl ⁻ to OH ⁻ - 7 to 17	Cl ⁻ to OH ⁻ 7 to 17	Cl ⁻ to OH ⁻ 7 to 17

PRODUCT NAME	INDION 220Na	INDION 225Na	INDION 225H	INDION 225H (MB)
Applications	Standard grade resin for water softening	Premium grade resin for water softening	Demineralization and dealkalization	Superior sphericity, Premium grade resin for use in mixed bed
Resin Type	Gel Strong Acidic Cation	Gel Strong Acidic Cation	Gel Strong Acidic Cation	Gel Strong Acidic Cation
Matrix Type	Styrene DVB	Styrene DVB	Styrene DVB	Styrene DVB
Functional Groups	- SO ₃	- SO ₃	- SO ₃	- SO ₃
Standard Ionic Form	Na ⁺	Na ⁺	H ⁺	H ⁺
Particle size range - mm	0.3 - 1.2	0.3 - 1.2	0.3 - 1.2	0.3 - 1.2
% Moisture	50 - 55	43 - 50	47 - 54	47 - 54
Max. Operating Temperature° C	120	120	120	120
Total Exchange Capacity, meq/ml	1.8	2.0	1.8	1.8
Volume change %	Na ⁺ to H ⁺ 6 to 10	Na ⁺ to H ⁺ 6 to 10	Na ⁺ to H ⁺ 6 to 10	Na ⁺ to H ⁺ 8 to 10

PRODUCT NAME	INDION 850	INDION 236
Applications	Removal of strong acids from water	Removal of alkalinity from water
Resin Type	Macroporous Weak Base Anion	Gel Weak Acidic Cation
Matrix Type	Styrene DVB	Crosslinked polyacrylic
Functional Groups	- NR ₂ - N ⁺ R ₃	- COO ⁻
Standard Ionic Form	Free base	H ⁺
Particle size range – mm	0.3 – 1.2	0.3 - 1.2
% Moisture	47 - 55 (Cl ⁻)	46 - 54
Max. Operating Temperature° C	60	100
Total Exchange Capacity, meq/ml	1.5	4.0
Volume change %	FB to Cl ⁻ 15 to 25	H ⁺ to Na ⁺ 80 to 120

PRODUCT NAME	INDION 740	INDION 730
Applications	Demineralization in co-current and countercurrent mode.	Demineralization in co-current and countercurrent mode.
Resin Type	Macroporous Strong Acidic Cation	Macroporous Strong Acidic Cation
Matrix Type	Styrene DVB	Styrene DVB
Functional Groups	- SO ₃	- SO ₃
Standard Ionic Form	H ⁺	H ⁺
Particle size range - mm	0.3 - 1.2	0.3 - 1.2
% Moisture	62 - 66	54- 57
Max. Operating Temperature° C	120	120
Total Exchange Capacity, meq/ml	1.3 (Na ⁺)	1.7 (Na ⁺)
Volume change %	Na ⁺ to H ⁺ 8 to 10	Na ⁺ to H ⁺ 6 to 8

PRODUCT NAME	INDION FR10	INDION CAM 1	INDION MB 6 SR
Applications	Removal of Fluoride from water	To produce high purity demineralized water	Super regenerated mixture of cation and anion resin for producing ultrapure water
Resin Type	-	Mixed bed	Mixed bed
Matrix Type	Styrene DVB	Crosslinked polystyrene	Crosslinked polystyrene
Functional Groups	NA	SO ₃ ⁻ N ⁺ R ₃	SO ₃ ⁻ N ⁺ R ₃
Standard Ionic Form	NA	H ⁺ OH ⁺	H ⁺ OH ⁺
Particle size range - mm	0.3 - 1.2	0.3 - 1.2	0.3 - 1.2
% Moisture	46 - 50	-	-
Max. Operating Temperature° C	80	60	60
Total Exchange Capacity, meq/ml	-	-	-
Volume change %	-	-	-