

DOWEX[®]**DOWEX[®] Resin Properties****SERVA**
Electrophoresis

	DOWEX[®] 1 X ...	DOWEX[®] 50 WX ...
Type	Strongly basic gel-type anion exchanger, type I	Strongly acid gel-type cation exchanger
Functional group	trimethyl ammonium	Sulfonic acid
Cross linkage (% DVB)	2 or 8	2, 4 or 8
Ionic form as shipped	Cl ⁻	Na ⁺ (analytical grade) H ⁺ (practical grade)
Shipping density (kg/l)	approx. 0.7	approx. 0.8
Volume change (%)	Cl ⁻ → OH ⁻ ~ + 20 %	Na ⁺ → H ⁺ ~ + 8 %
Effective working range (pH)	0 -14	0 -14
Selectivity for ions	I ⁻ > NO ₃ ⁻ > Br ⁻ > Cl ⁻ > acetate > F ⁻ > OH ⁻	Ba ²⁺ > Sr ²⁺ > Ca ²⁺ > Mg ²⁺ > Cs ⁺ > Rb ⁺ > K ⁺ > Na ⁺ > H ⁺ > Li ⁺
Total exchange capacity (eq/l)	1X2 ≥ 0.6 1X8 ≥ 1.2	WX2 ≥ 0.6 WX4 ≥ 1.1 WX8 ≥ 1.7
Thermal stability	OH ⁻ form max. 60 °C Cl ⁻ form max. 100 °C	Na ⁺ form max. 120 °C H ⁺ form max. 120 °C
Moisture (%) (pract. grade)	1X2 65 – 80 1X8 39 - 48	WX2 74 – 82 WX4 64 – 72 WX8 50 - 58

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