



# Olsen's Agricultural Laboratory, Inc.

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## SODIUM HAZARD:

Table 1: Sodium hazard of irrigation water based on sodium adsorption ration (SAR) or adjusted sodium adsorption ratio (SARadj) and electrical conductivity ( $EC_w$ ) of irrigation water. To determine sodium hazard, match your  $EC_w$  value with the appropriate column, read down to your SAR or SARadj\* value and read sodium hazard in left-hand column.

SALINITY HAZARD, $EC_w$					
Sodium Hazard	0.00 - 0.74	0.75 - 1.49	1.50 - 2.99	3.00+	
	Low	Medium	High	Very High	
SAR or SARadj Ranges					
Low	0 - 6	0 - 6	0 - 4	0 - 2	No permeability problem.
Medium	6 - 9	6 - 8	4 - 6	2 - 4	Usually no permeability problems expected except when soils are high in clay and $EC_w$ is high or very high.
High	9 - 12	8 - 10	6 - 8	4 - 6	Possible permeability problems. Can use on sandy soils if leaching requirement met. May need calcium added if silt loam or finer texture. Monitor by soil test.
Very High	12+	10+	8+	6+	Serious permeability problems expected. Requires addition of soluble calcium and leaching with good quality water. Monitor with soil test at end of each season.

\*Use SARadj if water is used to irrigate soils containing free calcium carbonate (lime). Soil pH will exceed 7.0.