

Comparative Properties of RockSalt Alternatives

| Relative (to NaCl) Effects | Cost | Freezing Point Depression (°C) (per unit weight) | Effective Lower Limit (°F) [#] | Corrosive?* | Aquatic Toxicity?* | Other Impacts? |
|--|--------|--|---|-------------|-----------------------|---------------------|
| Roadsalt (NaCl) | \$1.00 | 1 | 20 | Yes | X | Na (trees) |
| Potassium Chloride (KCl) | 1.54 | 0.78 | 12 | Yes | XXXX | K (fertilizer) |
| Magnesium Chloride (MgCl ₂ ·6H ₂ O) | 1.44 | 0.29 | 5 | Yes | XXX | |
| Magic™ | | | | | | |
| Calcium Chloride (CaCl ₂) | 1.23 | 0.53 | -25 | Very | XX | Ca (soils) |
| Calcium Acetate [Ca(CH ₂ COOH) ₂] | 3.50 | 0.33 | 0 | | | Ca (soils); +BOD |
| Magnesium Acetate [Mg(CH ₂ COOH) ₂]·4H ₂ O | 3.27 | 0.27 | 0 | | | +BOD |
| CMA | | | | | | |
| Sodium Acetate (NaCH ₂ COOH·3H ₂ O) | 3.86 | 0.73 | 0 | | | +BOD |
| Potassium Acetate | 2.04 | 0.60 | -15 | | | K (fertilizer);+BOD |
| Urea [CO(NH ₂) ₂] | 0.64 | 0.97 | 15 | | | N (aquatic) |
| Sand | 0.95 | 0 | | | | Sediment (Aquatic) |

*from Clarkson University Report, 2008

[#] from www.facilitiesnet.com