

$$\text{Runoff}_{initial} = \frac{(1.123206 * \text{Pest}_{field} * \text{App}_{eff} * \text{Runoff}_{area} * \text{Runoff}_{\%} * \text{KD}_{\%} * \text{Deg}_{\%} / \text{Depth}_{incorp})}{20}$$

$\text{Pest}_{field}$  = Initial pesticide in the field

$\text{App}_{eff}$  = Pesticide application efficiency

$\text{Runoff}_{area}$  = Runoff area; set to 10 ha

$\text{Runoff}_{\%}$  = Percent of runoff from field; set to 10%

$\text{KD}_{\%}$  = Fraction of pesticide dissolved after adsorption to soil and/or organic matter

$\text{Deg}_{\%}$  = Fraction of pesticide remaining in the field on each of the seven days post application

$\text{Depth}_{incorp}$  = Incorporation depth (in); smallest value is 1"