

Calculation of Element to Oxide for N, P & K

See analysis report & RB209 for values

Liquid Waste/Sludge (02 03 01)

Total Solids = 1.38% Dry Matter

Application Rate (in metric tonnes) = 45tn/ha

Phosphorous to Phosphate

14300mg/kg Dry Weight

$14300/1000 = 14.3 \text{ kg/tn}$

$14.3 \times (1.32/100) = 0.18876 \text{ kg/tn}$

$0.18876 \times 24 \text{ (spreading rate)} = 4.53\text{kg/ha}$

$4.53 \times 2.291 = 10.38 \text{ kg/ha P}_2\text{O}_5$

$0.18876 \times 23.5 \text{ (spreading rate)} = 4.44\text{kg/ha}$

$4.44 \times 2.291 = 10.17 \text{ kg/ha P}_2\text{O}_5$

Potassium to Potassium Oxide

19200mg/kg Dry Weight

$19200/1000 = 19.2 \text{ kg/tn}$

$19.2 \times (1.38/100) = 0.26496 \text{ kg/tn}$

$0.26496 \times 24 \text{ (spreading rate)} = 6.359\text{kg/ha}$

$6.359 \times 1.205 = 7.66 \text{ kg/ha K}_2\text{O}$

$0.26496 \times 23.5 \text{ (spreading rate)} = 6.227\text{kg/ha}$

$6.227\text{kg/ha} \times 1.205 = 7.50 \text{ kg/ha K}_2\text{O}$

G3 Calculating Waste Additions in OXIDE Format

Nitrogen additions (not oxide)

Nitrogen, Kjeldhal as N 84700mg/kg

$$84700/1000 = 84.7\text{kg/tn}$$

$$84.7 \times (1.38/100) = 1.16886\text{kg/tn}$$

$$1.16886 \times \mathbf{24} \text{ (spreading rate)} = \mathbf{28.05\text{kg/ha N}}$$

$$1.16886 \times \mathbf{23.5} \text{ (spreading rate)} = \mathbf{27.47\text{kg/ha N}}$$