

COMMON NITROGEN CONVERSIONS

Table 1: Conversion Factors in Soil

When You Know	Multiply by	To Find
ppm NO ₃ -N	2	lbs N/acre in 6 inch Soil Samples
ppm NO ₃ -N	4	lbs N/acre in 12 inch Soil Samples
ppm NO ₃	0.452	lbs N/acre in 6 inch Soil Samples
ppm NO ₃	0.904	lbs N/acre in 12 inch Soil Samples

Table 2: Percent Nitrogen Forms in Standard Nitrogen Solutions

	Nitrate	Ammonia	Urea	lbs N/gal
CAN-17 (17-0-0)	11.6	5.4		2.15
AN-20 (20-0-0)	10.0	10.0		2.10
UREA-20 (20-0-0)			20.0	1.87
UAN-28 (28-0-0)	7.0	7.0	14.0	2.98
UAN-32 (32-0-0)	7.8	7.8	16.4	3.54

Table 3: Conversion Factors for Nitrate in Water

When You Know	Multiply by	To Find
ppm NO ₃	0.226	ppm NO ₃ -N
ppm NO ₃ -N	4.43	ppm NO ₃

Table 4: Conversion Table for Nitrate in Irrigation Water

Nitrate (NO ₃ -N) ppm	lbs N/acre-foot	lbs N/acre-inch
1	2.71	0.23
5	13.55	1.13
10	27.10	2.26
15	40.65	3.39
20	54.20	4.52
25	67.75	5.65
50	135.50	11.30
75	203.25	16.94
100	271.00	22.58
125	338.75	28.23
150	406.50	33.88
175	474.25	39.52
200	542.00	45.17

$$\text{Applied Water (in)} = \frac{\text{Flow (GPM)}}{449} \times \frac{\text{Irrigation Time (hrs)}}{\text{acres}}$$

$$\text{N Applied (lbs/ac)} = \text{Nitrate-N (ppm)} \times \text{Applied Water (in)} \times 0.23$$

Additional Information Available at: agmpep.com