



Minn-Dak Spent Lime Quicksheet



Phosphorus

- Minn-Dak's Spent Lime contains approximately 5,000 ppm (0.5%) of actual Phosphorus
- Every 1 ton per acre of spent lime applied contains roughly 15.58 lbs of Phosphorus (P_2O_5)
- As a rule of thumb, you will raise your soil P levels by 1 ppm per ton of actual lime applied (Olsen Test)

Nitrogen

- Minn-Dak's Spent Lime contains approximately 0.35% Nitrogen
- Every 1 ton per acre of spent lime applied contains roughly 2.35 lbs of Nitrogen. However, it is important to keep in mind that not all of this Nitrogen is readily available to the plant and remains tied up in the soil. U of M speculates that almost 50% of the Nitrogen applied would be available for the plant uptake and use the following year.

Lime Applied (TPA)	Nitrogen Applied per Acre (Pounds)	Nitrogen Value per Acre* (Dollars)	Phosphorus Applied per Acre (Pounds)	Phosphorus Value per Acre (Dollars)	Total Fertility Value per Acre (Dollars)
1	2.35	\$0.71	15.6	\$11.86	\$12.57
5	11.75	\$3.53	77.9	\$59.20	\$62.73
7	16.45	\$4.94	109.1	\$82.92	\$87.86
10	23.5	\$7.05	155.8	\$118.41	\$125.46

* - Reflects a Nitrogen availability rate of 50%

- Diammonium Phosphate (18-46-0) currently retails for \$700/ton or \$0.76/pound of Phosphorus (P_2O_5)

- Urea (46-0-0) currently retails for \$550/ton or \$0.60/pound of Nitrogen [$CO(NH_2)_2$]

Odds & Ends

- A Spent Lime application offers long-term Aphanomyces suppression resulting in a higher on-farm profit.
- Application of Spent Lime will also help increase soil levels of Potassium, Calcium, Magnesium, Sodium and Boron
- Spent Lime will not raise your soil pH above 8.2
- There are no negative yield impacts on rotational crops (wheat, beans, corn, etc.) and in most cases, the Spent Lime application is found to be very beneficial
- Application of Spent Lime will not have an effect on soluble salt levels
- Local contractors generally charge around \$6.50 per ton for Spent Lime applications
- Minn-Dak Spent Lime has a moisture content of 33% (67% total solids)
- Minn-Dak is equipped to load out Spent Lime year-round including Pre-Harvest enabling growers to take advantage of and utilize longer back-hauls
- Just like everything else these days, there is a small amount of paperwork required by the end user - please contact your Agriculturist for assistance

Spent Lime Application

- The recommended application rate is 7 to 10 tons per acre
- For best results, apply the lime 1 year prior to sugarbeets
- Spread the lime as evenly as possible
- Thoroughly incorporate with tillage - the lower into the soil profile, the better performance



