

How much YAN?

The YAN needed for a yeast to complete the fermentation is strictly related to the strain characteristics (mentioned in the introductory yeast chart) and the must Brix. YAN stands for Yeast Available Nitrogen. It is a measure of the amount of Nitrogen available to the yeast in the grape juice. It is composed by two fractions: Ammonia (NH₄ present in must and added with DAP) and free alpha-amino Nitrogen or FAN (from the amino-acidic fraction of must or nutrients). To target YAN and add nutrients properly winemakers need to know yeast characteristics and Brix. Brix measurement refers to the concentration of sugars in the must. The traditional method for measure Brix is by using the hydrometer, which will measure the density (specific gravity) of the grape juice in Brix. 1 Brix equals 10 g/L of sugars.

TO CALCULATE TOTAL PPM OF YAN REQUIRED:

Total YAN to target for very low/ low YAN requiring strains = **Brix x 7.5**

Total YAN to target for medium YAN requiring strains = **Brix x 9**

Total YAN to target for high YAN requiring strains = **Brix x 12.5**

- Fermentations prolonged using low temperatures (<12 C) will need about 20% extra YAN.
- YAN addition will be equal to the target YAN minus the available YAN
- The quantity of YAN added for AEB nutrients is available in the chart at the beginning of this chapter.
- To improve nutrient efficiency, divide the additions in two, one at the beginning and one at 1/3 of the fermentation.