



## KB2009 - Setting Analyte Significant Figures and Decimals in TITAN<sup>®</sup> INFORMATION

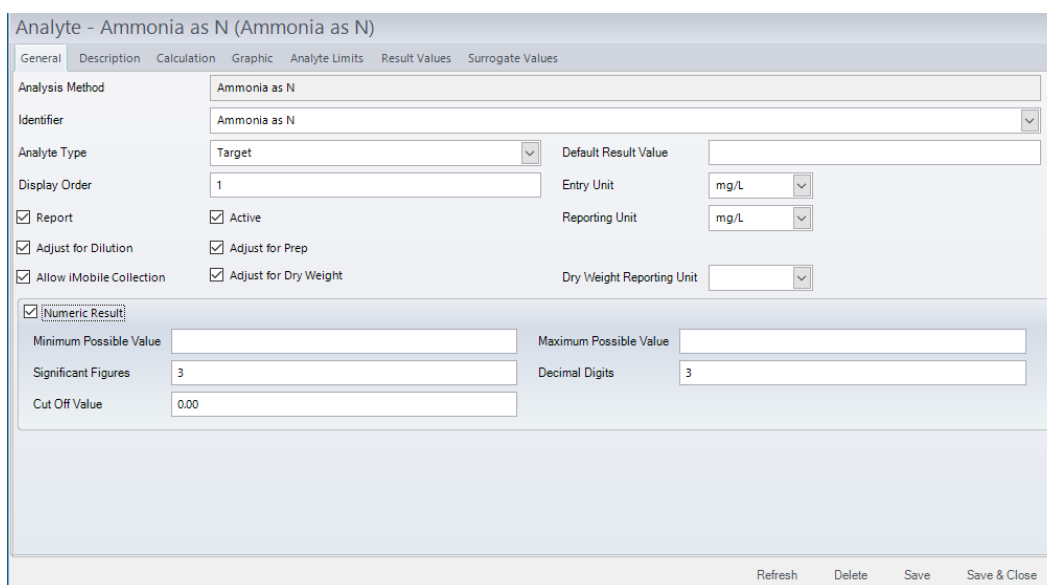
### Introduction:

Many TITAN<sup>®</sup> users apply TITAN<sup>®</sup>'s Analysis Methods to analyze their data, often with numeric values. Our objective for this article is to teach you how to configure the numeric results of any method's analytes, enabling you to conform to specific numeric standards with a few simple tweaks.

### Information:

Significant figures and decimals are configured within a specific Analyte. To view an Analyte, navigate to *Configuration* → *Analysis Methods* on the Laboratory ribbon and open an Analysis Method. Click on the *Analytes* tab within the Analysis Method to view a listing of all Analytes for the selected Analysis Method. Open an Analyte to configure its significant figures and decimals.

In order to configure an Analyte's significant figures and decimals, the checkbox for *Numeric Result* must be selected. You can set the maximum and minimum possible values for the Analyte, but the fields of interest here are Significant Figures, Cut Off Value, and Decimal Digits.



The screenshot displays the 'Analyte - Ammonia as N (Ammonia as N)' configuration window. The 'General' tab is active. The 'Analysis Method' is 'Ammonia as N'. The 'Identifier' is 'Ammonia as N'. The 'Analyte Type' is 'Target'. The 'Display Order' is '1'. The 'Entry Unit' is 'mg/L'. The 'Reporting Unit' is 'mg/L'. The 'Dry Weight Reporting Unit' is empty. The 'Numeric Result' checkbox is checked. The 'Minimum Possible Value' is empty. The 'Maximum Possible Value' is empty. The 'Significant Figures' field contains the value '3'. The 'Decimal Digits' field contains the value '3'. The 'Cut Off Value' field contains the value '0.00'. At the bottom right, there are buttons for 'Refresh', 'Delete', 'Save', and 'Save & Close'.

## Significant Figures

Significant Figures (Sig Figs) indicate the precision of your results. Correct precision is critical to valid data. If we only measure an Analyte to the nearest thousand, reporting the number 2,000.00 is an inaccurate assumption because it assumes the first two figures after the decimal point are zero. Significant figures include only those digits not introduced by inaccurate data collection or merely used to indicate place. For example, with the Significant Figures value set to 3, as shown in the figure above, a result value entered as 2312 would be reported as 2310.

## Cut Off Value

The Cut Off Value indicates the value at which you switch between using Significant Figures and Decimal Digits. If you don't use cut off values for this analyte in your lab, you can set the Cut Off Value to -1. If you only report this analyte in decimal values, you can increase the cutoff value beyond reasonable limits, such as increasing it to 1,000,000.

## Decimal Digits

The Decimal Digits field indicates the maximum number of decimal digits recorded for this analyte. If you chose two (2) decimal digits, the maximum possible number less than one that you could record would be 0.99, but with three (3) decimal digits you could theoretically record 0.999. This option allows you more or less precision depending on your lab's requirements.

## Applies To:

- TITAN® 3.7 and above



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