

Carb 310 Method Explained

What is method Carb 310? The State of California has legislated limits for volatile organic compounds (VOC's) in consumer products that are spelled out in method Carb 310. Carb 310 also provides references to test procedures for the determination of VOC's in consumer products. Carb 310 is an extension of EPA method 24 for VOC determination on surface coatings. The Carb 310 method addresses the need to reduce VOC emissions and thereby reduce ozone producing reactions in our ambient air, and in this quest they have exempted a number of compounds that do not "meet the definition of a VOC" and do not significantly contribute to an increase in ozone. The Carb 310 test procedures provide for the quantification of these specific compounds that may then be subtracted from the total volatile emissions of the product. There are several other nuances to the Carb 310 rules. For example, Carb 310 allows low vapor pressure products to be assessed based upon their vapor pressure alone. Another procedure called simulated distillation may be used to assess VOC content as discussed in Carb 310. Carb 310 method also determines the presence of compounds prohibited by ARB.

The most straightforward Carb 310 procedure determines four basic parameters:

- Total Volatile Content
- Total Water Content
- Total Ammonia
- Total Excluded Compounds

These are combined to afford the Carb 310 VOC content as shown below.

Carb 310 VOC = Total Volatile Content - Water - Ammonia - Excluded Compounds

If you have any questions on Carb 310 method or testing, please contact us.

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